

DIVISION 1

GENERAL REQUIREMENTS

1-01 DEFINITIONS AND TERMS

1-01.1 General

The following abbreviations and terms are defined here as they are used in any Contract documents and Specifications. When used in the Proposal Form to denote items of Work and units of measurements, abbreviations are defined to mean the full expression.

1-01.2 Abbreviations

1-01.2(1) Associations and Miscellaneous

These abbreviations are used in Plans and Specifications as defined here:

AAA	American Arbitration Association
AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGA	American Gas Association
AGC	Associated General Contractors of America
AI	Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMS	Aerospace Material Specification
ANLA	American Nursery and Landscape Association
ANSI	American National Standards Institute
APA	American Plywood Association
API	American Petroleum Institute
APWA	American Public Works Association
ARA	American Railway Association
AREA	American Railway Engineering Association
ARTBA	American Road & Transportation Builders Association
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
CFR	Code of Federal Regulations
CLI	Chain Link Institute
CRAB	County Road Administration Board

CRSI	Concrete Reinforcing Steel Institute
DIPRA	Ductile Iron Pipe Research Association
EEI	Edison Electric Institute
EPA	Environmental Protection Agency
ESAL	Equivalent Single Axle Loads
FHWA	Federal Highway Administration
FOP	Field Operating Procedure
FSS	Federal Specifications and Standards, General Services Administration
HUD	United States Department of Housing and Urban Development
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
ITE	Institute of Transportation Engineers
IES	Illumination Engineering Society
IMSA	International Municipal Signal Association
LID	Local Improvement District
LPI	Lighting Protection Institute
MSHA	Mine Safety and Health Act
MUTCD	Manual on Uniform Traffic Control Devices
NEC	National Electrical Code
NEMA	National Electrical Manufacturers' Association
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NRMCA	National Ready Mix Concrete Association
OMWBE	Office of Minority and Women's Business Enterprises
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PPI	Plastic Pipe Institute
P/PCI	Precast/Prestressed Concrete Institute
QPL	Qualified Products List
RAM	Request for Approval of Material
RCW	Revised Code of Washington (Laws of the State)
RID	Road Improvement District
SAE	Society of Automotive Engineers
SEPA	State Environmental Policy Act
SOP	Standard Operating Procedure
SSPC	Steel Structures Painting Council
TIB	Transportation Improvement Board
UL	Underwriter Laboratory
ULID	Utility Local Improvement District
UMTA	Urban Mass Transit Administration
WAC	Washington Administrative Code
WAQTC	Western Alliance for Quality Transportation Construction
WCLIB	West Coast Lumber Inspection Bureau

WISHA	Washington Industrial Safety and Health Administration
WRI	Wire Reinforcement Institute
WSDOE	Washington State Department of Ecology
WSDOT	Washington State Department of Transportation
WWPA	Western Wood Products Association

1-01.2(2) Items of Work and Units of Measurement

Plans and Specifications may include common engineering and construction abbreviations. Many such abbreviations need no definition. But when the following abbreviations are used, they will only mean:

Agg.	Aggregate
Al.	Aluminum
ATB	Asphalt Treated Base
BST	Bituminous Surface Treatment
Cl.	Class
Cfm	Cubic Feet per Minute
Cfs	Cubic Feet per Second
Comb.	Combination
Conc.	Concrete
CPF	Composite Pay Factor
Crib.	Cribbing
Culv.	Culvert
cy or cu yd.	Cubic Yard
Diam.	Diameter
ESAL	Equivalent Single Axle Loads
Est.	Estimate or Estimated
Excl.	Excluding
F	Fahrenheit
Gph	Gallon per Hour
Gpm	Gallon per Minute
Hund.	Hundred
HMA	Hot Mix Asphalt
In.	Inch
Incl.	Including
JMCIF	Job Mix Compliance Incentive Factor
JMF	Job Mix Formula
Lb	Pound(s)
LF or Lin. Ft.	Linear Foot (Feet)
LS	Lump Sum
M	Thousand
MBM	Thousand Feet Board Measure
MUTS	Minimum Ultimate Tensile Strength
PCPS	Precast Prestressed
Pres.	Pressure
PSI	Pounds per Square Inch
PVC	Polyvinyl Chloride

RAP	Recycled Asphalt Pavement
Reg.	Regulator
Reinf.	Reinforced, Reinforcing
Sec.	Section
St.	Steel
Str.	Structural
sy or sq. yd.	Square Yard(s)
Th.	Thick or Thickness
Tr.	Treatment
Va	Air Voids
VC	Vitrified Clay
VFA	Voids Filled with Asphalt
VMA	Voids in Mineral Aggregate

1-01.3 Definitions

Addendum

A written or graphic document, issued to all Bidders and identified as an Addendum prior to Bid opening, which modifies or supplements the Bid Documents and becomes a part of the Contract.

Auxiliary Lane

The part of the Roadway next to Traveled Ways for parking, speed changes, turning, weaving, truck climbing or for anything that adds to through traffic movement.

Award

The formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Bid, Proposal

The offer of a Bidder on a properly completed Proposal Form to perform the Contract.

Bidder

An individual, partnership, firm, corporation, or joint venture, submitting a Proposal or Bid. When required by law or otherwise the individual, partnership, firm, corporation, or joint venture shall be prequalified.

Bid Documents

The component parts of the proposed Contract which may include, but are not limited to, the Proposal Form, the proposed Contract Provisions, the proposed Contract Plans, Addenda, and subsurface boring logs (if any).

Bridge Approach Embankments

An embankment beneath a Structure and extending 100-feet beyond a Structure's end (at Subgrade elevation for the full embankment width) plus an access ramp on a 10:1 slope to the original ground elevation. Also, any embankment that replaces unsuitable foundation soil beneath the Bridge Approach Embankment.

Call for Bids (Advertisement for Bids)

The published public notice soliciting Proposals or Bids for Work stating, among other things, the time, place, and date for receiving and opening the Bids.

Commission, Washington State Transportation Commission

The appointive body having authority over state transportation matters as provided by law.

Completion Dates

Substantial Completion Date is the day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, all the initial plantings are completed and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date is the day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date is the day all the Work specified in the Contract is completed and all the obligations of the Contractor under the Contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

Contract

The written agreement between the Contracting Agency and the Contractor. It describes, among other things:

1. What work will be done, and by when;
2. Who provides labor and materials; and
3. How Contractors will be paid.

The Contract includes the Contract (agreement) Form, Bidder's completed Proposal Form, Contract Provisions, Contract Plans, standard Specifications, Standard Plans, Addenda, various certifications and affidavits, supplemental agreements, change orders, and subsurface boring logs (if any).

Contract Bond

The approved form of security furnished by the Contractor and the Contractor's Surety as required by the Contract, that guarantees performance of all the Work required by the Contract and payment to anyone who provides supplies or labor for the performance of the Work.

Contract Form (Agreement Form)

The form provided by the Contracting Agency that requires the authorized signatures of the Contractor and the Contracting Agency to result in formal execution of the Contract.

Contracting Agency

Agency of Government that is responsible for the execution and administration of the Contract.

Contractor

The individual, partnership, firm, corporation, or joint venture, Contracting with the Contracting Agency to do prescribed Work.

Contract Plans

A publication addressing the Work required for an individual project. At the time of the call for Bids, the Contract Plans may include, but are not limited to, the following: a vicinity map, a summary of quantities, structure notes, signing information, traffic control plans, and detailed drawings; all for a specific individual project. At the time of the Contract execution date, the Contract Plans include any Addenda.

Contract Provisions

A publication addressing the Work required for an individual project. At the time of the call for Bids, the Contract Provisions may include, for a specific individual project, the amendments to the standard Specifications, the Special Provisions, a listing of the applicable Standard Plans, the prevailing minimum hourly wage rates, and an

informational Proposal Form with the listing of Bid items. The proposed Contract Provisions may also include, for a specific individual project, the Required Contract Provisions Federal-aid Construction Contracts, and various required certifications or declarations. At the time of the Contract execution date, the Contract Provisions include the proposed Contract Provisions and include any Addenda, a copy of the Contract Form, and a copy of the Proposal Form with the Contract prices and extensions.

Department, Department of Transportation

The State Agency authorized by law to administer transportation-related work.

Engineer

The Contracting Agency's representative who administers the construction program for the Contracting Agency.

Federal Highway Administration

The Federal Agency authorized to approve plans and contracts for Federal-Aid Highway projects. They also inspect such projects to ensure Contract compliance.

Frontage Road

A local street or road usually next to an arterial Highway that serves abutting property and adjacent areas and controls access.

Highway

A public way for vehicles, including the entire Right of Way.

Inspector

The Project Engineer's representative who inspects Contract performance in detail.

Laboratory

The laboratories of the Contracting Agency, or other laboratories the Contracting Agency authorizes to test Work, soils, and materials.

Plans

The Contract Plans or Standard Plans which show location, character, and dimensions of prescribed Work including layouts, profiles, cross-sections, and other details.

Project Engineer

The Engineer's representative who directly supervises the engineering and administration of a construction project.

Proposal Form

The form provided to Bidders by the Contracting Agency for submittal of a Proposal or Bid to the Contracting Agency for a specific project. The form includes the item number, estimated plan quantity, and item description of the Bid items along with blank spaces to be completed by the Bidder for the unit prices, extensions, the total Bid amount, signatures, date, acknowledgment of Addenda, and the Bidder's address. The required certifications and declarations are part of the form.

Right of Way

Land, property, or property interest, usually in a strip, acquired for or devoted to transportation purposes.

Roadbed

The graded part of the Roadway within top and side slopes, prepared as a foundation for the pavement structure and Shoulders.

Roadway

The portion of the Right of Way within the outside limits of the side slopes.

Secretary, Secretary of Transportation

The chief executive officer of the Department and other authorized representatives.

Shoulder

The part of the Roadway next to the Traveled Way or Auxiliary Lanes. It provides lateral support of base and surface courses and is an emergency stopping area for vehicles.

Special Provisions

Supplemental Specifications and modifications to the standard Specifications and the amendments to the standard Specifications that apply to an individual project.

Specifications

Provisions and requirements for the prescribed Work.

Standard Plans

A manual of specific plans or drawings adopted by the Contracting Agency which show frequently recurring components of Work that have been standardized for use.

State

The state of Washington acting through its representatives.

Structures

Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, service pipes, sewers, underdrains, foundation drains, and other features found during Work that the Contract may or may not classify as a Structure.

Subcontractor

An individual, partnership, firm, corporation, or joint venture who is sublet part of the Contract by the Contractor.

Subgrade

The top surface of the Roadbed on which subbase, base, surfacing, pavement, or layers of similar materials are placed.

Substructure

The part of the Structure *below*:

1. The bottom of the grout pad for the simple and continuous span bearing, or
2. The bottom of the girder or bottom slab soffit, or
3. Arch skewbacks and construction joints at the top of vertical abutment members or rigid frame piers.

Substructures include endwalls, wingwalls, barrier and railing attached to the wingwalls, and cantilever barriers and railings.

Superstructure

The part of the Structure *above*:

1. The bottom of the grout pad for the simple and continuous span bearing, or
2. The bottom of the girder or bottom slab soffit, or
3. Arch skewbacks and construction joints at the top of vertical abutment members or rigid frame piers.

and extending:

1. from the back of pavement seat to the back of pavement seat when the endwalls are attached to the Superstructure, or
2. from the expansion joint at the end pier to the expansion joint at the other end pier when the endwalls are not attached to the Superstructure.

Superstructures include, but are not limited to, girders, slab, barrier, and railing attached to the Superstructure.

Superstructures do not include endwalls, wingwalls, barrier and railing attached to the wingwalls, and cantilever barriers and railings unless supported by the Superstructure.

Surety

A company that is bound with the Contractor to ensure performance of the Contract, payment of all obligations pertaining to the Work, and fulfillment of such other conditions as are specified in the Contract, Contract Bond, or otherwise required by law.

Titles (or Headings)

The titles or headings of the sections and subsections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.

Traveled Way

That part of the Roadway made for vehicle travel excluding Shoulders and Auxiliary Lanes.

Work

The provision of all labor, materials, tools, equipment, and everything needed to successfully complete a project according to the Contract.

Working Drawings

Shop drawings, shop plans, erection plans, falsework plans, framework plans, cofferdam, cribbing and shoring plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data, including a schedule of submittal dates for Working Drawings where specified, which the Contractor must submit to the Engineer for approval.

1-02 BID PROCEDURES AND CONDITIONS**1-02.1 Prequalification of Bidders**

The Contracting Agency will provide a Bid Proposal Form only after a prospective Bidder submits a “Standard Questionnaire and Financial Statement.” This questionnaire enables the Contracting Agency to decide whether or not the Bidder is qualified to perform Highway, road, or other public work. The questionnaire shall be sworn to before a person authorized to take oaths.

On the basis of this questionnaire, the Contracting Agency will either specify the type and amount of Work it considers the prospective Bidder prequalified to perform or advise the prospective Bidder of the reasons they failed to be prequalified. To remain prequalified, the Bidder must submit an updated questionnaire once a year and supplements whenever required by the Contracting Agency.

A submittal deadline applies to any prospective Bidder not prequalified or from whom a supplemental questionnaire is due. To receive consideration for issuance of a Bid Proposal Form on a specific project, the questionnaire (or supplement) must be received by the Prequalification Engineer no less than 15-days prior to the scheduled Bid opening.

The Contracting Agency may withdraw a Bidder’s prequalification or reduce its amount if:

1. The extent of other work the Bidder has under Contract (Contracting Agency or otherwise) justifies such action, or
2. Past or present work on a Contracting Agency Contract has been less than satisfactory.

If a Bidder’s questionnaire does not contain sufficient information, the Contracting Agency may refuse to provide a Bid Proposal Form and disregard any Bid submitted. After opening Bids, the Contracting Agency may decide that a prequalified Bidder is not responsible and may refuse to accept the Bid on that basis. Such a refusal will be conclusive unless the Bidder appeals within five days to the Superior Court of Thurston County. Any appeal shall be heard within ten days after it is filed and shall provide at least five days’ notice to the Contracting Agency.

The Bidder shall ensure that the combination of the Bid amount and other Contract work with the Contracting Agency does not exceed the prequalification amount. If this combination does exceed the prequalification amount, the Contracting Agency may determine the Bidder to be not responsible and refuse to Award a Contract.

Two or more prospective Bidders may, in a joint venture, prequalify and Bid jointly on a single Contract. Each shall have filed a “Standard Questionnaire and Financial Statement.” Together they shall also file a standard form of “Individual Project Statement of Joint Venture” and a joint venture agreement in a form acceptable to the Contracting Agency.

To Bid jointly on a continuous joint venture on more than one Contract, two or more prospective Bidders shall submit:

1. A “Standard Questionnaire and Financial Statement” compiled for the joint venture;
2. A “Standard Questionnaire and Financial Statement” for each member (if the Contracting Agency has no copy on file); and
3. A copy of the “Joint Venture Agreement” signed by each member of the joint venture and naming each person authorized to sign documents on its behalf. (If any member is a corporation, a corporate resolution shall accompany the agreement. This resolution shall authorize the joint venture agreement and name the officer(s) authorized to sign the joint venture agreement or Contract on behalf of the corporation.)

The Contracting Agency will treat the continuing joint venture as a new firm and decide its prequalification on that basis.

Any joint venture and each of its members is subject to Section 1-02.14.

1-02.2 Plans and Specifications

The Contracting Agency will place review copies of the Plans and Specifications on file in the offices of:

1. All Regional Administrators of the Department,
2. The County Engineer of the county in which the Work is located, and
3. These plans service offices of the Associated General Contractors of America: Seattle, Spokane, and Tacoma, Washington.

Prospective Bidders may purchase Plans and Specifications from the Department of Transportation in Olympia, Washington, for the fee given in the call for Bids. The fee shall accompany each request for Plans. Checks shall be payable to the State of Washington, Department of Transportation.

After Award of the Contract, the Plans and Specifications will be issued without charge on the following basis:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced Plans (11" × 17") and Special Provision	10	Furnished automatically upon Award.
Additional reduced Plans (11" × 17") and Special Provision	10	Furnished only upon request for projects with more than 100 plan sheets.
Large Plans (22" × 34") and Special Provisions	1	Furnished automatically upon award.
Additional large Plans (22" × 34") and Special Provisions	1	Furnished only upon request for projects with more than 100 plan sheets.

To Subcontractors and Suppliers	No. of Sets	Basis of Distribution
Reduced Plans (11"x 17") and accompanying Special Provisions	1	Furnished only upon request by the Prime Contractor for an approved Subcontractor or material supplier.

Additional Plans may be purchased by payment of the current rates.

1-02.3 Estimated Quantities

The quantities shown in the Proposal Form and the Contract Forms are estimates and are stated only for Bid comparison purposes. The Contracting Agency does not warrant expressly or by implication, that the actual quantities of Work will correspond with those estimates. Payment will be made on the basis of the actual quantities of each item of Work completed in accordance with the Contract requirements.

1-02.4 Examination of Plans, Specifications, and Site of Work

1-02.4(1) General

The Bidder shall carefully examine the Bid Documents as defined in Section 1-01.3. Submittal of a Bid shall be conclusive evidence that the Bidder has made these examinations and understands all requirements for the performance of the completed Work. The Bidder further warrants, agrees, and acknowledges by submitting a Bid that it:

1. Has taken steps reasonably necessary to ascertain the nature and location of the Work;

2. Has investigated and satisfied itself as to the general and local conditions which can affect the Work or its cost, including but not limited to:
 - a. conditions bearing upon acquisition, transportation, disposal, handling, and storage of materials;
 - b. the availability of labor, materials, water, electric power, and roads;
 - c. uncertainties of weather, river stages, tides, or similar physical conditions at the site;
 - d. the conformation and condition of the ground;
 - e. the character of equipment and facilities needed preliminary to and during Work performance; and
 - f. the site biological hazards and associated physical hazards.
3. Has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Work site (including material sites) as well as from the Bid Documents and other information made a part of this Contract; and
4. Has satisfied itself as to the adequacy of time allowed for the completion of the physical Work on the Contract.

Any failure of the Bidder to take the actions described and acknowledged in this clause shall not relieve the Bidder from responsibility for estimating properly the difficulty and cost of successfully performing the Work, or from proceeding to successfully perform the Work without additional expense to the Contracting Agency.

The Bidder agrees that the Contracting Agency shall not be liable to it on any claim for additional payment or additional time or any claim whatsoever if the claim directly or indirectly results from the Bidder's failure to investigate and familiarize itself sufficiently with the conditions under which the Contract is to be performed.

The Bidder shall be familiar and comply with all Federal, State, tribal, and local laws, ordinances, and regulations which might affect those engaged in the Work. The Contracting Agency will not consider any plea of misunderstanding or ignorance of such requirements.

Bid prices shall reflect what the Bidder anticipates to be the cost of completing the Work, including methods, materials, labor, and equipment. Except as the Contract may provide, the Bidder shall receive no payment for any costs that exceed those in the Bid prices.

Prospective Bidders are advised that projects with Work on or adjacent to water may require insurance coverage in compliance with:

1. The Longshoremen's and Harbor Worker's Compensation Act (administered by U.S. Department of Labor), or
2. The State Industrial Insurance (administered by the Washington State Department of Labor and Industries), or
3. Both.

The Contractor shall bear all cost for such insurance as provided in Section 1-07.10. No Claim shall be allowed because of any ambiguity in the Contract if:

1. The Bidder discovers an ambiguity but fails to notify the Contracting Agency; or
2. The Bidder failed to discover a patent ambiguity that would be discovered by a reasonably prudent contractor in preparing its Bid.

Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, must request the explanation or interpretation in writing soon enough to allow a written reply to reach all prospective Bidders before the submission of their

Bids. Oral explanations, interpretations, or instructions given by anyone before the Award of a Contract will not be binding on the Contracting Agency. Any information given a prospective Bidder concerning any of the Bid Documents will be furnished to all prospective Bidders as an Addendum if that information is deemed by the Contracting Agency to be necessary in submitting Bids or if the Contracting Agency concludes that the lack of the information would be prejudicial to other prospective Bidders.

1-02.4(2) Subsurface Information

If the Contracting Agency has made subsurface investigation of the site of the proposed Work, the boring log data and soil sample test data accumulated by the Contracting Agency will be made available for inspection by the Bidders. The boring logs shall be considered as part of the Contract. However, the Contracting Agency makes no representation or warranty expressed or implied that:

1. The Bidders' interpretations from the boring logs are correct;
2. Moisture conditions and indicated water tables will not vary from those found at the time the borings were made; and
3. The ground at the location of the borings has not been physically disturbed or altered after the boring was made.

The Contracting Agency specifically makes no representations, guarantees, or warranties as to the condition, materials, or proportions of the materials between the specific borings regardless of any subsurface information the Contracting Agency may make available to the prospective Bidders.

The availability of subsurface information from the Contracting Agency shall not relieve the Bidder or the Contractor from any risks or of any duty to make examinations and investigations as required by Section 1-02.4(1) or any other responsibility under the Contract or as may be required by law.

1-02.5 Proposal Forms

At the request of a prequalified Bidder, the Contracting Agency will provide a Proposal Form for any project on which the Bidder is eligible to Bid.

The Proposal Form will identify the project and its location and describe the Work. It will also list estimated quantities, units of measurement, the items of Work, and the materials to be furnished at the unit Bid prices. The Bidder shall complete spaces on the Proposal Form that call for unit prices, extensions, the total Bid amount, signatures, date, acknowledgment of Addenda, and the Bidder's address. The required certifications are included as part of the Proposal Form.

1-02.6 Preparation of Proposal

The Contracting Agency will accept only those Proposals properly executed on forms it provides. Unless it approves in writing, the Contracting Agency will not accept Proposals on forms attached to the Plans and stamped "Informational".

All prices shall be in legible figures (not words) written in ink or typed. The Proposal shall include:

1. A unit price for each item (omitting digits more than four places to the right of the decimal point),
2. An extension for each unit price (omitting digits more than two places to the right of the decimal point), and
3. The total Contract price (the sum of all extensions).

In the space provided on the signature sheet, the Bidder shall confirm that all Addenda has been received.

The Bidder shall submit a completed "Disadvantaged, Minority or Women's Business Enterprise Certification" if it applies.

The Bidder shall submit with the Bid a list of:

1. Subcontractors who will perform the work of heating, ventilation and air conditioning, plumbing as described in Chapter 18.106 RCW and electrical as described in Chapter 19.28 RCW, and
2. The work those Subcontractors will perform on the Contract.
3. Shall not list more than one Subcontractor for each category of work identified, except, when Subcontractors vary with Bid alternates, in which case the Bidder shall identify which Subcontractor will be used for which alternate.

If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use any Subcontractor to perform those items of work.

Proposals of corporations shall be signed by the officer or officers having authority to sign them. If a Bidder is a copartnership, the Proposal shall be signed by an authorized member of the copartnership. When the Bidder is a joint venture, the Proposal shall be signed by one or more individuals as authorized by the Joint Venture.

1-02.7 Bid Deposit

A deposit of at least 5-percent of the total Bid shall accompany each Bid. This deposit may be by cash, certified check, cashier's check, or a proposal bond (Surety bond). The proposal bond may be in hard copy or electronic format via Surety2000.com or Insurevision.com and BidX.com. Any proposal bond shall be on a form acceptable to the Contracting Agency and shall be signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any way to modify the minimum 5-percent required. The Surety shall: (1) be registered with the Washington State Insurance Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of 5-percent shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

1-02.8 Noncollusion Declaration and Lobbying Certification

1-02.8(1) Noncollusion Declaration

When required by Section 112(c) Title 23, United States Code, a declaration shall be provided certifying that the Bidder has not taken part in collusion or other action that would restrain competitive Bidding.

The Code of Federal Regulations 23 CFR 635.112(f)(1) requires that: "Each Bidder shall file a sworn or unsworn statement executed by, or on behalf of the person, firm, association, or corporation submitting the Bid, certifying that such persons, firm, association, or corporation has not either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive Bidding in connection with the submitted Bid. Failure to submit the sworn or unsworn statement as part of the Bid Proposal package will make the Bid nonresponsive and not eligible for Award consideration." In addition, 23 CFR 635.112(f)(1) requires that the Contracting Agency provide the form for the declaration to prospective Bidders and that the declaration shall be executed by such persons, firm, association, or corporation under penalty of perjury under the laws of the United States.

Therefore, by signing the Proposal, the Bidder will be deemed to have signed and agreed to the requirements of the Noncollusion Declaration.

1-02.8(2) Lobbying Certification

Section 319 of Public Law 101-121 prohibits payment of Federal Funds for contract lobbying by the Contractor and any Subcontractor or lower tier subcontractor whose contract exceeds \$100,000. A Certification for Federal-Aid Contracts (Form DOT 272-040) is provided in the Proposal Form for Contracts exceeding \$100,000 to address this requirement.

By signing the proposal, the Bidder will be deemed to have signed and agreed to the conditions and requirements of the Certification for Federal-Aid Contracts.

The Contractor shall ensure that a Certification for Federal-Aid Contracts (Form DOT 272-040) is included in every contract with any Subcontractor or lower tier subcontractor whose contract exceeds \$100,000. By signing the contract any Subcontractor or lower tier subcontractor will be deemed to have signed and agreed to the conditions and requirements of the Certification for Federal-Aid Contracts. The Contractor shall keep evidence in their files that such Subcontractor or lower tier subcontractor has committed to this requirement.

Section 319 of Public Law 101-121 also provides that, if any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit to the Contracting Agency the Standard Form LLL, DISCLOSURE OF LOBBYING ACTIVITIES, in accordance with the instructions on the form. Any Subcontractor or lower tier subcontractor whose contract exceeds \$100,000 shall disclose in the same manner as the Contractor, except that, Standard Form LLL shall be submitted to the Contractor for processing to the Contracting Agency.

Audits will be conducted to ensure compliance with this section.

The Certification for Federal-Aid Contracts (Form DOT 272-040) may be reproduced from the Proposal form. The disclosure form is available from the Washington State Department of Transportation's Pre-Contract Office, Transportation Building, Olympia, Washington 98504.

1-02.9 Delivery of Proposal

Each Proposal shall be sealed and submitted in the envelope provided with it, or electronically via Expedite software and BidX.com at the location and time identified in Section 1-02.12. The Bidder shall fill in all blanks on this envelope to ensure proper handling and delivery.

The Contracting Agency will not consider Proposals it receives after the time fixed for opening Bids in the call for Bids.

1-02.10 Withdrawal or Revision of Proposal

After submitting a Bid Proposal to the Contracting Agency, the Bidder may withdraw or revise it if:

1. The Bidder submits a written request signed by an authorized person, and
2. The Contracting Agency receives the request before the time for opening Bids.

The original Bid Proposal may be revised and resubmitted as the official Bid Proposal if the Contracting Agency receives it before the time for opening Bids.

1-02.11 Combination and Multiple Proposals

A project may be organized for Bidding and construction by various methods to enable proposals to be submitted for combined projects or for the construction method specified. The Contracting Agency reserves the right to Award combined or separate Bids or by such other method deemed most advantageous to the Contracting Agency. Only those combined Bids specifically prescribed in the project Special Provisions will be accepted. If contracts are Awarded for combinations of projects, separate contracts will be written for each project included in the combination.

A Bidder submitting more than one Proposal at a letting may attach one of the following statements to each Proposal:

"We prefer to be Awarded not more than (Number) Contracts for projects for which we have submitted Bids at this letting;" or

“We prefer to be Awarded Contracts of a total value of not more than \$ ____ for projects for which we have submitted Bids at this letting.”

Such attachments will not make the Proposals irregular. The Contracting Agency will Award each Contract to the lowest responsible Bidder but will consider such attachment in determining the responsibility of the Bidder to perform each Contract for which a statement has been attached.

1-02.12 Public Opening of Proposals

Proposals will be opened and publicly read at the time indicated in the call for Bids unless the Bid opening has been delayed or canceled. Bidders, their authorized agents, and other interested parties are invited to be present.

1-02.13 Irregular Proposals

1. A Proposal will be considered irregular and will be rejected if:
 - a. The Bidder is not prequalified;
 - b. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
 - c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
 - d. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
 - e. A price per unit cannot be determined from the Bid Proposal;
 - f. The Proposal form is not properly executed;
 - g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6.
 - h. The Bidder fails to submit or properly complete a Disadvantaged, Minority or Women's Business Enterprise Certification, if applicable, as required in Section 1-02.6; or
 - i. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.
2. A Proposal may be considered irregular and may be rejected if:
 - a. The Proposal does not include a unit price for every Bid item;
 - b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
 - c. Receipt of Addenda is not acknowledged;
 - d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
 - e. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders

A Bidder may be deemed not responsible and the Proposal rejected if:

1. More than one Proposal is submitted for the same project from a Bidder under the same or different names;
2. Evidence of collusion exists with any other Bidder. Participants in collusion will be restricted from submitting further Bids;
3. A Bidder is not prequalified for the Work or to the full extent of the Bid;
4. An unsatisfactory performance record exists based on past or current Contracting Agency Work;

5. There is uncompleted work (Contracting Agency or otherwise) which might hinder or prevent the prompt completion of the Work Bid upon;
6. The Bidder failed to settle bills for labor or materials on past or current Contracts;
7. The Bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract;
8. The Bidder is unable, financially or otherwise, to perform the Work;
9. A Bidder is not authorized to do business in the state of Washington; or
10. There are any other reasons deemed proper by the Contracting Agency.

1-02.15 Pre-Award Information

Before Awarding any Contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible Bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the Work,
4. A breakdown of costs assigned to any Bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer, or
6. Any other information or action taken that is deemed necessary to ensure that the Bidder is the lowest responsible Bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

After opening and reading Proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any Bid item, the price per unit will control. The total of extensions, corrected where necessary, will be used by the Contracting Agency for Award purposes and to fix the amount of the Contract Bond.

The right is reserved by the Contracting Agency to waive informalities in the bidding, accept a Proposal of the lowest responsible Bidder, reject any or all Bids, republish the call for Bids, revise or cancel the Work, or require the Work to be done in another way if the best interest of the Contracting Agency is served.

A Bidder who wishes to claim error after the Bids have been publicly opened and read as required by RCW 47.28.090 shall promptly notify the Contracting Agency that an error occurred. The Bidder shall submit a notarized affidavit or declaration under penalty of perjury signed by the Bidder and accompanied by the work sheets used in the preparation of the Bid, requesting relief from the responsibilities of Award. The affidavit or declaration shall describe the specific error(s) and certify that the work sheets are the ones used in preparing the Bid.

The affidavit or declaration shall be submitted no later than 5:00 p.m. on the first business day after Bid opening or the claim will not be considered. The Contracting Agency will review the affidavit or declaration and the certified work sheets to determine the validity of the claimed error and if the error is of the kind for which the law allows relief from forfeiture of the Bid deposit. If the Contracting Agency concurs in the claim of error and determines that the error is of the kind which allows relief from forfeiture, the Bidder will be relieved of responsibility and the Bid deposit of the Bidder will be returned. If the Contracting Agency does not concur in the error or determines that the error is not the kind for which the law allows relief, the Contracting Agency may Award the Contract and if the Bidder refuses to execute the Contract, the Bidder's Bid deposit shall be forfeited as required by RCW 47.28.100.

1-03.1(1) Tied Bids

After opening Bids, if two or more lowest responsive Bid totals are exactly equal, then the tie-breaker will be determined by drawing as described in this Section. Two or more slips of paper will be marked as follows: one marked "Winner" and the other(s) marked "unsuccessful." The slips will be folded to make the marking unseen. The slips will be placed inside a box. One authorized representative of each Bidder shall draw a slip from the box. Bidders shall draw in alphabetic order by the name of the firm as registered with the Washington State Department of Licensing. The slips shall be unfolded and the firm with the slip marked "Winner" will be determined to be the successful Bidder and eligible for Award of the Contract. Only those Bidders who submitted a Bid total that is exactly equal to the lowest responsive Bid are eligible to draw.

1-03.2 Award of Contract

Normally, Contract Award or Bid rejection will occur within 45 calendar days after Bid opening. If the lowest responsible Bidder and the Contracting Agency agree, this deadline may be extended. If they cannot agree on an extension by the 45-calendar day deadline, the Contracting Agency reserves the right to Award the Contract to the next lowest responsive Bidder or reject all Bids. The Contracting Agency will notify the successful Bidder of the Contract Award in writing.

1-03.3 Execution of Contract

Within 20-calendar days after the Award date, the successful Bidder shall return the signed Contracting Agency-prepared Contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the Contract by the Contracting Agency, the successful Bidder shall provide any pre-Award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a Contract, no Proposal shall bind the Contracting Agency nor shall any Work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any Work begun outside such areas and for any materials ordered before the Contract is executed by the Contracting Agency.

If the Bidder experiences circumstances beyond their control that prevents return of the Contract documents within 20-calendar days after the Award date, the Contracting Agency may grant up to a maximum of 20 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

The successful Bidder shall provide an executed Contract Bond for the full Contract amount. This Contract Bond shall:

1. Be on a Contracting Agency-furnished form;
2. Be signed by an approved Surety (or Sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Be conditioned upon the faithful performance of the Contract by the Contractor within the prescribed time; and
4. Guarantee that the Surety shall indemnify, defend, and protect the Contracting Agency against any claim of direct or indirect loss resulting from the failure:
 - a. Of the Contractor (or any of the employees, Subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform the Contract, or
 - b. Of the Contractor (or the Subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, Subcontractors, lower tier subcontractors, materialperson, or any other person who provides supplies or provisions for carrying out the Work.

The Contracting Agency may require Sureties or Surety companies on the Contract Bond to appear and qualify themselves. Whenever the Contracting Agency deems the Surety or Sureties to be inadequate, it may, upon written demand, require the Contractor to furnish additional Surety to cover any remaining Work. Until the added Surety is furnished, payments on the Contract will stop.

1-03.5 Failure to Execute Contract

Failure to return the insurance certification and bond with the signed Contract as required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's Business Enterprise information if required in the Contract, or failure or refusal to sign the Contract shall result in forfeiture of the proposal bond or deposit of this Bidder. If this should occur, the Contracting Agency may then Award the Contract to the second lowest responsible Bidder or reject all remaining Bids. If the second lowest responsible Bidder fails to return the required documents as stated above within the time provided after Award, the Contract may then be Awarded successively in a like manner to the remaining lowest responsible Bidders until the above requirements are met or the remaining Proposals are rejected.

1-03.6 Return of Bid Deposit

When Proposals have been examined and corrected as necessary, proposal bonds and deposits accompanying Proposals ineligible for further consideration will be returned. All other proposal bonds and deposits will be held until the Contract has been properly executed. When the Contract has been properly executed, all remaining deposits or bonds, except those subject to forfeiture, will be returned.

1-03.7 Judicial Review

Any decision made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of Thurston County, Washington.

1-04 SCOPE OF THE WORK

1-04.1 Intent of the Contract

The intent of the Contract is to prescribe a complete Work. Omissions from the Contract of details of Work that are necessary to carry out the intent of the Contract shall not relieve the Contractor from performing the omitted Work.

1-04.1(1) Bid Items Included in the Proposal

The Contractor shall provide all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all Work for the items included in the Proposal.

1-04.1(2) Bid Items Not Included in the Proposal

When the Contract specifies Work that has no Bid item, and the Work is not specified as being included with or incidental to other Bid items, an equitable adjustment will be made in accordance with Section 1-04.4 unless that Work is customarily considered as incidental to other items.

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

The complete Contract includes these parts: the Contract Form, Bidder's completed Proposal Form, Contract Plans, Contract Provisions, standard Specifications, Standard Plans, Addenda, various certifications and affidavits, supplemental agreements, change orders, and subsurface boring logs (if any). These parts complement each other in describing a complete Work. Any requirement in one part binds as if stated in all parts. The Contractor shall provide any Work or materials clearly implied in the Contract even if the Contract does not mention it specifically.

Any inconsistency in the parts of the Contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 3, 4, 5, 6, and 7; 2 presiding over 3, 4, 5, 6, and 7; and so forth):

1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Amendments to the Standard Specifications,
6. Standard Specifications, and
7. Standard Plans.

On the Contract Plans, Working Drawings, and Standard Plans, figured dimensions shall take precedence over scaled dimensions.

This order of precedence shall not apply when Work is required by one part of the Contract but omitted from another part or parts of the Contract. The Work required in one part must be furnished even if not mentioned in other parts of the Contract.

If any part of the Contract requires Work that does not include a description for how the Work is to be performed, the Work shall be performed in accordance with standard trade practice(s). For purposes of the Contract, a standard trade practice is one having such regularity of observance in the trade as to justify an expectation that it will be observed by the Contractor in doing the Work.

In case of any ambiguity or dispute over interpreting the Contract, the Engineer's decision will be final as provided in Section 1-05.1.

1-04.3 Vacant

1-04.4 Changes

The Engineer reserves the right to make, at any time during the Work, such changes in quantities and such alterations in the Work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the Contract nor release the Surety, and the Contractor agrees to perform the Work as altered. Among others, these changes and alterations may include:

1. Deleting any part of the Work,
2. Increasing or decreasing quantities,
3. Altering Specifications, designs, or both,
4. Altering the way the Work is to be done,
5. Adding new Work,
6. Altering facilities, equipment, materials, services, or sites, provided by the Contracting Agency.
7. Ordering the Contractor to speed up or delay the Work.

The Engineer will issue a written change order for any change unless the remainder of this section provides otherwise.

If the alterations or changes in quantities significantly change the character of the Work under the Contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the Contract. The basis for the adjustment shall be agreed upon prior to the performance of the Work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable. If the alterations or changes in quantities do not significantly change the character of the Work to be performed under the Contract, the altered Work will be paid for as provided elsewhere in the Contract. The term *significant change* shall be construed to apply only to the following circumstances:

- A. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction or
- B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125-percent or decreased below 75-percent of the original Contract quantity. For the purpose of this section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.

For Item 1, an equitable adjustment for deleted Work will be made as provided in Section 1-09.5.

For Item 2, if the actual quantity of any item, exclusive of added or deleted amounts included in agreed change orders, increases or decreases by more than 25-percent from the original Plan quantity, the unit Contract prices for that item may be adjusted in accordance with Section 1-04.6.

For any changes except Item 1 (deleted Work) or Item 2 (increasing or decreasing quantities), the Engineer will determine if the change should be paid for at unit Contract price(s). If the Engineer determines that the change increased or decreased the Contractor's costs or time to do any of the Work including unchanged Work, the Engineer will make an equitable adjustment to the Contract. The equitable adjustment will be by agreement with the Contractor. However, if the parties are unable to agree, the Engineer will determine the amount of the equitable adjustment in accordance with Section 1-09.4 and adjust the time as the Engineer deems appropriate. Extensions of time will be evaluated in accordance with Section 1-08.8. The Engineer's decision concerning equitable adjustment and extension of time shall be final as provided in Section 1-05.1.

The Contractor shall proceed with the Work upon receiving:

1. A written change order approved by the Engineer, or
2. An oral order from the Project Engineer before actually receiving the written change order.

Changes normally noted on field stakes or variations from estimated quantities, except as provided in subparagraph A or B above, will not require a written change order. These changes shall be made at the unit prices that apply. The Contractor shall respond immediately to changes shown on field stakes without waiting for further notice.

The Contractor shall obtain written consent of the Surety or Sureties if the Engineer requests such consent.

The Contracting Agency has a policy for the administration of cost reduction alternatives proposed by the Contractor. The Contractor may submit proposals for changing the Plans, Specifications, or other requirements of the Contract. These proposals must reduce the cost or time required for construction of the project. When determined appropriate by the Contracting Agency, the Contractor will be allowed to share the savings.

Guidelines for submitting Cost Reduction Incentive Proposals are available at the Project Engineer's office. The actions and requirements described in the guidelines are not part of the Contract. The guidelines requirements and the Contracting Agency's decision to accept or reject the Contractor's proposal are not subject to arbitration under the arbitration clause or otherwise subject to litigation.

1-04.4(1) Minor Changes

Payments or credits for changes amounting to \$15,000 or less may be made under the Bid item "Minor Change". At the discretion of the Contracting Agency, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes.

The Contractor will be provided a copy of the completed order for Minor Change. The agreement for the Minor Change will be documented by signature of the Contractor, or notation of verbal agreement. If the Contractor is in disagreement with anything required by the order for Minor Change, the Contractor may protest the order as provided in Section 1-04.5.

Payments or credits will be determined in accordance with Section 1-09.4. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount for "Minor Change" in the Proposal to become a part of the total Bid by the Contractor.

1-04.5 Procedure and Protest by the Contractor

The Contractor accepts all requirements of a change order by: (1) endorsing it, (2) writing a separate acceptance, or (3) not protesting in the way this section provides. A change order that is not protested as provided in this section shall be full payment and final settlement of all claims for Contract time and for all costs of any kind, including costs of delays, related to any Work either covered or affected by the change. By not protesting as this section provides, the Contractor also waives any additional entitlement and accepts from the Engineer any written or oral order (including directions, instructions, interpretations, and determinations).

If in disagreement with anything required in a change order, another written order, or an oral order from the Engineer, including any direction, instruction, interpretation, or determination by the Engineer, the Contractor shall:

1. Immediately give a signed written notice of protest to the Project Engineer or the Project Engineer's field Inspectors before doing the Work;
2. Supplement the written protest within 14-calendar days with a written statement and supporting documents providing the following:
 - a. The date and nature of the protested order, direction, instruction, interpretation or determination;
 - b. A full discussion of the circumstances which caused the protest, including names of persons involved, time, duration and nature of the Work involved, and a review of the Plans and Contract Provisions referenced to support the protest;
 - c. The estimated dollar cost, if any, of the protested Work and a detailed breakdown showing how that estimate was determined; and
 - d. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption; and
 - e. If the protest is continuing, the information required above shall be supplemented upon request by the Project Engineer until the protest is resolved.

Throughout any protested Work, the Contractor shall keep complete records of extra costs and time incurred. The Contractor shall permit the Engineer access to these and any other records related to the protested Work as determined by the Engineer.

The Engineer will evaluate all protests provided the procedures in this section are followed. If the Engineer determines that a protest is valid, the Engineer will adjust payment for Work or time by an equitable adjustment in accordance with Section 1-09.4. Extensions of time will be evaluated in accordance with Section 1-08.8. No adjustment will be made for an invalid protest.

If the Engineer determines that the protest is invalid, that determination and the reasons for it will be provided in writing to the Contractor. The determination will be provided within 14-calendar days after receipt of the Contractor's supplemental written statement (including any additional information requested by the Project Engineer to support a continuing protest) described in item 2 above.

If the Contractor does not accept the Engineer's determination then the Contractor shall pursue the dispute and claims procedures set forth in Section 1-09.11. In spite of any protest or dispute, the Contractor shall proceed promptly with the Work as the Engineer orders.

By failing to follow the procedures of this Section 1-04.5 and Section 1-09.11, the Contractor completely waives any claims for protested Work.

1-04.6 Variation in Estimated Quantities

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of any Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25-percent from the original Proposal quantity. In that case, payment for Contract Work may be adjusted as described herein.

The adjusted final quantity shall be determined by starting with the final accepted quantity measured after all Work under an item has been completed. From this amount, subtract any quantities included in additive change orders accepted by both parties. Then, to the resulting amount, add any quantities included in deductive change orders accepted by both parties. The final result of this calculation shall become the adjusted final quantity and the basis for comparison to the original Proposal quantity.

1. Increased Quantities.

Either party to the Contract will be entitled to renegotiate the price for that portion of the adjusted final quantity in excess of 1.25 times the original Proposal quantity. The price for excessive increased quantities will be determined by agreement of the parties, or, where the parties cannot agree, the price will be determined by the Engineer based upon the actual costs to perform the Work, including reasonable markup for overhead and profit.

2. Decreased Quantities.

Either party to the Contract will be entitled to an equitable adjustment if the adjusted final quantity of Work performed is less than 75-percent of the original Bid quantity. The equitable adjustment shall be based upon and limited to three factors:

- a. Any increase or decrease in unit costs of labor, materials or equipment, utilized for Work actually performed, resulting solely from the reduction in quantity;
- b. Changes in production rates or methods of performing Work actually done to the extent that the nature of the Work actually performed differs from the nature of the Work included in the original plan; and
- c. An adjustment for the anticipated contribution to unavoidable fixed cost and overhead from the units representing the difference between the adjusted final quantity and 75-percent of the original Plan quantity.

The following limitations shall apply to renegotiated prices for increases and/or equitable adjustments for decreases:

1. The equipment rates shall be actual cost but shall not exceed the rates set forth in the AGC/WSDOT Equipment Rental Agreement (referred to in Section 1-09.6) that is in effect at the time the Work is performed.
2. No payment will be made for extended or unabsorbed home office overhead and field overhead expenses to the extent that there is an unbalanced allocation of such expenses among the Contract Bid items.
3. No payment for consequential damages or loss of anticipated profits will be allowed because of any variance in quantities from those originally shown in the Proposal form, Contract Provisions, and Contract Plans.
4. The total payment (including the adjustment amount and unit prices for Work performed) for any item that experiences an equitable adjustment for decreased quantity shall not exceed 75 percent of the amount originally Bid for the item.

If the adjusted final quantity of any item does not vary from the quantity shown in the Proposal by more than 25-percent, then the Contractor and the Contracting Agency agree that all Work under that item will be performed at the original Contract unit price.

When ordered by the Engineer, the Contractor shall proceed with the Work pending determination of the cost or time adjustment for the variation in quantities.

The Contractor and the Contracting Agency agree that there will be no cost adjustment for decreases if the Contracting Agency has entered the amount for the item in the Proposal form only to provide a common Proposal for Bidders.

1-04.7 Differing Site Conditions (Changed Conditions)

During the progress of the Work, if preexisting subsurface or latent physical conditions are encountered at the site, differing materially from those indicated in the Contract, or if preexisting unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in the Contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing site conditions before they are disturbed and before the affected Work is performed.

Upon written notification, the Engineer will investigate the conditions and if he/she determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any Work under the Contract, an adjustment, excluding loss of anticipated profits, will be made and the Contract modified in writing accordingly. The Engineer will notify the Contractor of his/her determination whether or not an adjustment of the Contract is warranted.

No Contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

The equitable adjustment will be by agreement with the Contractor. However, if the parties are unable to agree, the Engineer will determine the amount of the equitable adjustment in accordance with Section 1-09.4. Extensions of time will be evaluated in accordance with Section 1-08.8.

If the Engineer determines that different site conditions do not exist and no adjustment in costs or time is warranted, such determination shall be final as provided in Section 1-05.1.

If there is a decrease in the costs or time required to perform the Work, failure of the Contractor to notify the Engineer of the differing site conditions shall not affect the Contracting Agency's right to make an adjustment in the costs or time.

No claim by the Contractor shall be allowed unless the Contractor has followed the procedures provided in Section 1-04.5 and 1-09.11.

1-04.8 Progress Estimates and Payments

Engineer-issued progress estimates or payments for any part of the Work shall not be used as evidence of performance or quantities. Progress estimates serve only as basis for partial payments. The Engineer may revise progress estimates any time before final acceptance. If the Engineer deems it proper to do so, changes may be made in progress estimates and in the final estimate.

1-04.9 Use of Buildings or Structures

The Engineer will decide whether any building or Structure on the Right of Way may remain during the Work and whether the Contractor may use such a building or Structure.

1-04.10 Use of Materials Found on the Project

With the Engineer's written approval, the Contractor may use on the project: stone, gravel, sand, other materials from on-site excavation, or timbers removed in the course of the Work. Approval will not be granted if:

1. The excavated materials or timber fail to meet Contract requirements;
2. The excavated materials or timber are required for other use under the Contract;
3. The excavated materials are required for use as Selected Materials under Section 2-03.3(10); or
4. Such use is not in the best interests of the Contracting Agency as determined by the Engineer, whose decision shall be final as provided in Section 1-05.1.

Any material disturbed by, but not used in, the Work shall be disposed of as provided elsewhere in the Contract or as ordered by the Engineer in accordance with Section 1-04.4.

1-04.11 Final Cleanup

The Contractor shall perform final cleanup as provided in this section to the Engineer's satisfaction. The Engineer will not establish the Physical Completion Date until this is done. The Highway Right of Way, material sites, and all ground the Contractor occupied to do the Work shall be left neat and presentable. The Contractor shall:

1. Remove all rubbish, surplus materials, discarded materials, falsework, camp buildings, temporary structures, equipment, and debris; and
2. Deposit in embankments, or remove from the project, all unneeded, oversized rock left from grading, surfacing, or paving.

The Contractor shall not remove warning, regulatory, or guide signs unless the Engineer approves.

1-05 CONTROL OF WORK

1-05.1 Authority of the Engineer

The Engineer shall be satisfied that all the Work is being done in accordance with the requirements of the Contract. The Contract and Specifications give the Engineer authority over the Work. Whenever it is so provided in this Contract, the decision of the Engineer shall be final: provided, however, that if an action is brought within the time allowed in this Contract challenging the Engineer's decision, that decision shall be subject to the scope of judicial review provided in such cases under Washington case law.

The Engineer's decisions will be final on all questions including, but not limited to, the following:

1. Quality and acceptability of materials and Work,
2. Measurement of unit price Work,
3. Acceptability of rates of progress on the Work,
4. Interpretation of Plans and Specifications,
5. Determination as to the existence of changed or differing site conditions,
6. Fulfillment of the Contract by the Contractor,
7. Payments under the Contract including equitable adjustment,
8. Suspension(s) of Work,
9. Termination of the Contract for default or public convenience,
10. Determination as to unworkable days, and
11. Approval of Working Drawings.

The Project Engineer represents the Engineer on the project, with full authority to enforce Contract requirements and carry out the Engineer's orders. If the Contractor fails to respond promptly to the requirements of the Contract or orders from the Engineer:

1. The Project Engineer may use Contracting Agency resources, other contractors, or other means to accomplish the Work, and
2. The Contracting Agency will not be obligated to pay the Contractor, and will deduct from the Contractor's payments any costs that result when any other means are used to carry out the Contract requirements or Engineer's orders.

At the Contractor's risk, the Project Engineer may suspend all or part of the Work according to Section 1-08.6.

Nothing in these Specifications or in the Contract requires the Engineer to provide the Contractor with direction or advice on how to do the Work. If the Engineer approves or recommends any method or manner for doing the Work or producing materials, the approval or recommendation shall not:

1. Guarantee that following the method or manner will result in compliance with the Contract,
2. Relieve the Contractor of any risks or obligations under the Contract, or
3. Create any Contracting Agency liability.

1-05.2 Authority of Assistants and Inspectors

The Project Engineer may appoint assistants and inspectors to assist in determining that the Work and materials meet the Contract requirements. Assistants and Inspectors have the authority to reject defective material and suspend Work that is being done improperly, subject to the final decisions of the Project Engineer or, when appropriate, the Engineer.

Assistants and Inspectors are not authorized to accept Work, to accept materials, to issue instructions, or to give advice that is contrary to the Contract. Work done or material furnished which does not meet the Contract requirements shall be at the Contractor's risk

and shall not be a basis for a claim even if the Inspectors or assistants purport to change the Contract.

Assistants and Inspectors may advise the Contractor of any faulty Work or materials or infringements of the terms of the Contract; however, failure of the Project Engineer or the assistants or Inspectors to advise the Contractor does not constitute acceptance or approval.

1-05.3 Plans and Working Drawings

The Contract Plans are defined in Section 1-01.3. Any proposed alterations by the Contractor affecting the requirements and information in the Contract Plans shall be in writing and will require approval of the Engineer.

To detail and illustrate the Work, the Engineer may furnish to the Contractor additional plans and explanations consistent with the original plans. The Contractor shall perform the Work according to these additional plans and explanations.

The Contractor shall submit supplemental Working Drawings as required for the performance of the Work. Except as noted, all drawings and other submittals shall be delivered directly to the Project Engineer. The drawings shall be on sheets measuring 22 by 34-inches, 11 by 17-inches, or on sheets with dimensions in multiples of 8½ by 11-inches. The drawings shall be provided far enough in advance of actual need to allow for the review process by the Contracting Agency or other agencies. This may involve resubmittals because of revisions or rejections. Unless otherwise stated in the Contract, the Engineer will require up to 30-calendar days from the date the submittals or resubmittals are received until they are sent to the Contractor. After a plan or drawing has been approved and returned to the Contractor, all changes that the Contractor proposes shall be submitted to the Project Engineer for review and approval. This time will increase if the drawings submitted do not meet the Contract requirements or contain insufficient details.

If more than 30-calendar days are required for the Engineer's review of any individual submittal or resubmittal, an extension of time will be considered in accordance with Section 1-08.8.

The Contractor shall obtain the Engineer's written approval of the drawings before proceeding with the Work they represent. This approval shall neither confer upon the Contracting Agency nor relieve the Contractor of any responsibility for the accuracy of the drawings or their conformity with the Contract. The Contractor shall bear all risk and all costs of any Work delays caused by nonapproval of these drawings or plans.

Unit Bid prices shall cover all costs of Working Drawings.

1-05.4 Conformity With and Deviations From Plans and Stakes

The Special Provisions may require that the Contractor be contractually responsible for part or all of the project surveying. For survey requirements not the responsibility of the Contractor, the Engineer will lay out and set construction stakes and marks needed to establish the lines, grades, slopes, cross-sections, and curve superelevations. These stakes and marks will govern the Contractor's Work. The Contractor shall take full responsibility for detailed dimensions, elevations, and slopes measured from them.

All Work performed shall be in conformity with the lines, grades, slopes, cross sections, superelevation data, and dimensions as shown in the Plans, or as staked. If the Plans, Special Provisions, or these Specifications, state specific tolerances, then the Work shall be performed within those limits. The Engineer's decision on whether the Work is in conformity shall be final, as provided in Section 1-05.1.

The Contractor shall not deviate from the approved Plans and Working Drawings unless the Engineer approves in writing.

When the Contracting Agency is responsible for roadway surveying, and the Contractor trims the Subgrade with an automatic machine guided by reference lines, the Engineer will set control stakes for line and grade only once after grading is complete. To gain better control with unusual pavement widths or for other reasons, the Engineer may set more control stakes without added cost to the Contractor. The Contractor shall set reference lines from these control stakes for trimming Subgrade, for surfacing, and for controlling the paving machines.

The Contractor shall work to preserve stakes, marks, and monuments set by the Engineer. The Contracting Agency will deduct from payments due the Contractor all costs to replace such stakes, marks, and monuments carelessly or willfully damaged or destroyed by the Contractor's operation.

The Contractor shall provide enough safe areas to permit the Engineer to set those points and elevations that are the responsibility of the Contracting Agency and to perform random checks of the surveying performed by the Contractor.

The Contractor shall keep the Engineer informed of staking requirements to provide the Engineer with adequate time to set the stakes for which the Contracting Agency is responsible. Contractor requests for stakes shall be made at least three working days before the Engineer needs to begin the staking operation.

1-05.5 Vacant

1-05.6 Inspection of Work and Materials

The Engineer may inspect all Work and materials for conformity with Contract terms. To ensure the Engineer's safety and access during these inspections, the Contractor shall provide any equipment needed, such as walkways, railings, ladders, and platforms.

When the Engineer requests, the Contractor shall (without charge) provide samples of materials used or to be used in the Work. If the Contractor uses materials tested and approved for one project in an unrelated project, the Contracting Agency may deduct its testing and inspection costs from payments due the Contractor. The Engineer may order the Contractor to remove and replace, and bear the cost of doing so, any materials used without inspection.

Any inspections, tests, measurements, or other actions by Contracting Agency employees serve only one purpose: to assure the Engineer that Work, materials, progress rate, and quantities comply with Contract terms. Such work by Contracting Agency employees shall not relieve the Contractor from doing any Contract-assigned Work or from determining whether Contract requirements are being met. The Contractor shall correct any substandard Work or materials. The Engineer will reject unsuitable Work or materials even though inspected or paid for in a progress estimate.

If the Engineer requests, then the Contractor shall remove or uncover any area of the completed Work. After the Engineer inspects it, the Contractor shall restore the area to the standard the Contract requires. The Contractor shall bear the cost of uncovering, removing, and restoring the exposed Work: (a) if it proves unacceptable, or (b) if it was placed without authority or without due notice to the Engineer. The Contracting Agency will pay these costs by agreed price or by force account if the Work proves to be acceptable and the Contractor had performed the original Work with the authority of and due notice to the Engineer.

The Contractor, if advised to do so by the Engineer, shall permit representatives from other agencies to inspect the Work when it is to be done:

1. On any railroad, utility, or facility of a public agency; or
2. To the satisfaction of any federal, state, or municipal agency.

In any crushing or screening operation, the Contractor shall provide and install a mechanical sampler that:

1. Is automatic or semi-automatic;
2. Can safely and easily obtain representative samples of the materials being produced;
3. Can convey the samples to ground level in Contracting Agency-provided sacks;
4. Moves at an even rate through the full width of the materials stream falling from the discharge end of the belt, gate, or chute;
5. Is power driven during the material intercept cycle; and
6. Can be adjusted to take samples of about 100-pounds as often as the Engineer requires.

No material from the crushing or screen operation will be accepted until after the Engineer has approved the design and operation of the sampling equipment. The Contractor shall bear all costs of providing the sampling equipment, the power to operate it, and the space for its use.

1-05.7 Removal of Defective and Unauthorized Work

The Contracting Agency will not pay for unauthorized or defective Work. Unauthorized or defective Work includes: Work and materials that do not conform to Contract requirements; Work done beyond the lines and grades set by the Plans or the Engineer; and extra Work and materials furnished without the Engineer's written approval. At the Engineer's order, the Contractor shall immediately remedy, remove, replace, or dispose of unauthorized or defective Work or materials and bear all costs of doing so.

1-05.8 Vacant

1-05.9 Equipment

At the Engineer's request, the Contractor shall provide an operating and maintenance manual for each model or type of mixing, placing, or processing equipment before using it in the Work. The Contractor shall also provide test instruments to confirm whether the equipment meets operating requirements, such as vibration rate, revolutions-per-minute, or any other requirements.

The Contract may require automatically controlled equipment for some operations. If the automatic controls on such equipment fail, then the Contractor may operate the equipment manually for the remainder of that normal working day, provided the method of operation produces results otherwise meeting the Specifications. Continued operation of the equipment manually beyond this working day will be permitted only by specific authorization of the Engineer.

The Engineer will reject equipment that repeatedly breaks down or fails to produce results within the required tolerances. The Contractor shall have no claim for additional payment or for extension of time due to rejection and replacement of any equipment.

1-05.10 Guarantees

The Contractor shall furnish to the Contracting Agency any guarantee or warranty furnished as a customary trade practice in connection with the purchase of any equipment, materials, or items incorporated into the project.

1-05.11 Final Inspection

The Engineer will not make the final inspection until the physical Work required by the Contract, including final cleanup and all extra Work ordered by the Engineer, has been completed. The Physical Completion Date for the Contract will be determined as provided in Section 1-08.5.

1-05.12 Final Acceptance

The Contractor must perform all the obligations under the Contract before a Completion Date and final acceptance can occur. Failure of the Contractor to perform all the obligations under the Contract shall not bar the Contracting Agency from unilaterally accepting the Contract as provided in Section 1-09.9. The Secretary accepts the completed Contract and the items of Work shown in the final estimate by signature of the Final Contract Voucher Certification. The date of that signature constitutes the acceptance date. Progress estimates or payments shall not be construed as acceptance of any Work under the Contract.

The Contractor agrees that neither completion nor final acceptance shall relieve the Contractor of the responsibility to indemnify, defend, and protect the Contracting Agency against any claim or loss resulting from the failure of the Contractor (or the Subcontractors or lower tier subcontractors) to pay all laborers, mechanics, Subcontractors, materialpersons, or any other person who provides labor, supplies, or provisions for carrying out the Work or for any payments required for unemployment compensation under Title 50 RCW or for industrial insurance and medical aid required under Title 51 RCW.

Final acceptance shall not constitute acceptance of any unauthorized or defective work or material. The Contracting Agency shall not be barred from requiring the Contractor to remove, replace, repair, or dispose of any unauthorized or defective work or material or from recovering damages for any such work or material.

1-05.13 Superintendents, Labor, and Equipment of Contractor

At all times, the Contractor shall keep at the Work site a set of the Plans, Specifications, Special Provisions, and Addenda. The Contractor shall devote the attention required to make reasonable progress on the Work and shall cooperate fully with the Engineer and Inspectors.

Either the Contractor in person or an authorized representative shall remain on site whenever the Work is underway. Before the Work begins, the Contractor shall name in writing an experienced superintendent who understands the Contract and is able to supervise the Work. This superintendent shall have full authority to represent and act for the Contractor. Any superintendent who repeatedly fails to follow the Engineer's written or oral orders, directions, instructions, or determinations, shall be subject to removal from the project. Upon the written request of the Engineer, the Contractor shall immediately remove such superintendent and name a replacement in writing.

Competent supervisors experienced in the task being performed shall continuously oversee the Contract Work. At the Engineer's written request, the Contractor shall immediately remove and replace any incompetent, careless, or negligent employee.

Noncompliance with the Engineer's request to remove and replace personnel at any level shall be grounds for terminating the Contract under the terms of Section 1-08.10.

The Contractor shall keep all machinery and equipment in good, workable condition. It shall be adequate for its purpose and used by competent operators.

The Engineer will rate the Contractor's performance and Contract compliance in these categories:

1. Progress of Work,
2. Quality of Work,
3. Equipment,
4. Administration/Management/Supervision, and
5. Coordination and Control of Subcontractors.

Whenever the Contracting Agency evaluates the Contractor's prequalification under RCW 47.28.070, it will take these reports into account.

1-05.13(1) Emergency Contact List

The Contractor shall submit an Emergency Contact List to the Engineer no later than five calendar days after the date the Contract is executed. The list shall include, at a minimum, the Prime Contractor's Project Manager, or equivalent, the Prime Contractor's Project Superintendent and the Traffic Control Supervisor. The list shall identify a representative with delegated authority to act as the emergency contact on behalf of the Prime Contractor and include one or more alternates. The emergency contact shall be available upon the Engineer's request at other than normal working hours. The Emergency Contact List shall include 24-hour telephone numbers for all individuals identified as emergency contacts or alternates.

1-05.14 Cooperation With Other Contractors

The Contracting Agency may perform other work at or near the site, including any material site, with other forces than those of the Contractor. This work may be done with or without a contract. If such work takes place within or next to this project, the Contractor shall cooperate with all other contractors or forces. The Contractor shall carry out Work under this project in a way that will minimize interference and delay for all forces involved. The Engineer will resolve any disagreements that may arise among the contractors or the Contractor and the Contracting Agency over the method or order of doing the Work. The Engineer's decision in these matters shall be final, as provided in Section 1-05.1.

The coordination of the Work shall be taken into account by the Contractor as part of the site investigation in accordance with Section 1-02.4 and any resulting costs shall be incidental and included within the unit Bid prices in the Contract.

1-05.15 Method of Serving Notices

Any written notice to the Contractor required under these Specifications may be served on the Contractor either personally or by mailing or by delivery to the last post office address known to the Engineer.

All correspondence from the Contractor shall be directed to the Project Engineer.

1-06 CONTROL OF MATERIAL

1-06.1 Approval of Materials Prior To Use

Prior to use, the Contractor shall notify the Engineer of all proposed materials. The Contractor shall use the Qualified Product List (QPL), the Aggregate Source Approval (ASA) Database, or the Request for Approval of Material (RAM) form.

All equipment, materials, and articles incorporated into the permanent Work:

1. Shall be new, unless the Special Provisions or Standard Specifications permit otherwise;
2. Shall meet the requirements of the Contract and be approved by the Engineer;
3. May be inspected or tested at any time during their preparation and use; and
4. Shall not be used in the Work if they become unfit after being previously approved.

1-06.1(1) Qualified Products List (QPL)

The QPL is a listing of manufactured products that have been evaluated and determined suitable for use in Highway construction.

If the Contractor elects to use the QPL, the most current list available at the time the product is proposed for use, shall be used. The QPL submittal shall be prepared by the Contractor in accordance with the instructions in the QPL and submitted to the Engineer prior to use.

The QPL identifies the approved products, the applicable Specification section, and the basis for acceptance at the project level. The listing is divided into two categories, "Approved" and "Conditionally Approved". "Approved" products are denoted with an "A". Those products may be accepted without additional sampling. "Conditionally Approved" products are denoted with a "CA". The acceptance and use of these products is based upon additional job sampling and/or documentation. All additional acceptance actions need to be completed prior to the material being incorporated into the Work.

The Contractor shall advise the Engineer of the intended items for use from the QPL by reference to the Contract Bid item.

The use of listed products shall be restricted to the Standard Specification for which they are listed and fulfillment of the acceptance requirement defined in the QPL. Qualified products not conforming to the Specifications, not fulfilling the acceptance requirements, or improperly handled or installed, shall be replaced at the Contractor's expense.

To qualify for continued listing on the QPL, products may be sampled and tested for conformance to the Standard Specifications. The Contracting Agency reserves the right to make revisions to the QPL at any time.

If there is a conflict between the QPL and the Contract, the provisions of the Contract shall take precedence over the QPL.

The current QPL can be accessed on-line at www.wsdot.wa.gov/biz/mats/QPL/QPL.cfm

1-06.1(2) Request for Approval of Material (RAM)

The RAM shall be used when the Contractor elects not to use the QPL or the material is not listed in the QPL. The RAM shall be prepared by the Contractor in accordance with the instructions on the form (DOT 350-071) and submitted to the Engineer for approval before the material is incorporated into the Work.

Approval of the material does not constitute acceptance of the material for incorporation into the Work.

Additional acceptance actions as noted on the RAM need to be completed prior to the materials being incorporated into the Work.

When requesting approval of an item that requires fabrication, both the fabricator and the manufacturer of the base material shall be identified on the RAM.

1-06.1(3) Aggregate Source Approval (ASA) Database

The ASA is a database containing the results of WSDOT preliminary testing of aggregate sources. This database is used by the Contracting Agency to indicate the approval status of these aggregate sources for applications that require preliminary testing as defined in the Contract. The ASA 'Aggregate Source Approval Report' identifies the currently approved applications for each aggregate source listed. The acceptance and use of these aggregates is contingent upon additional job sampling and/or documentation.

Aggregates approved for applications on the ASA 'Aggregate Source Approval Report' not conforming to the Specifications, not fulfilling the acceptance requirements, or improperly handled or installed, shall be replaced at the Contractor's expense.

Aggregate materials that are not approved for use in the ASA data base may be sampled and tested by the Agency, for a specified use on a project, from the source or from a processed stockpile of the material.

For questions regarding the approval status of an aggregate source, contact the WSDOT Regional Materials Engineer for the Region the source is located in. The Contracting Agency reserves the right to make revisions to the ASA database at anytime.

If there is a conflict between the ASA database and the Contract, then the Contract shall take precedence over the ASA database in accordance with Section 1-04.2. The ASA database can be accessed on-line at www.wsdot.wa.gov/biz/mats/ASA.

1-06.2 Acceptance of Materials

1-06.2(1) Samples and Tests for Acceptance

The Contractor shall deliver representative samples (from the Contractor, Producer, or Fabricator) to the Engineer without charge before incorporating material into the Work. In providing samples, the Contractor shall provide the Engineer with sufficient time and quantities for testing before use. The Engineer may require samples at any time. Samples not taken by or in the presence of the Engineer will not be accepted for test, unless the Engineer permits otherwise.

The Contractor shall designate specific Contractor employees as points of contact for concrete testing and acceptance. Alternates shall be designated to ensure that direct contact is maintained during concrete placement. If designated by the Contractor to the Engineer, the concrete supplier will receive all 28-day concrete strength test results.

The Project Engineer will designate specific Contracting Agency employees as points of contact for concrete testing and acceptance.

The Contractor may observe any of the sampling and testing performed by the Engineer. If the Contractor observes a deviation from the specified sampling and testing procedures, the Contractor shall verbally described the deviations observed to the Engineer or designated representative immediately, and shall confirm these observed deviations in writing to the Engineer within 24-hours, referencing the specific procedures and steps. The Engineer will respond in writing within 3 working days of the receipt of the Contractor's written communications.

All field and Laboratory materials testing by the Engineer will follow methods described in Contract documents, or in the Washington State Department of Transportation *Materials Manual*, using qualified testing personnel and calibrated or verified equipment. The standard or tentative standard in effect on the Bid advertising date will apply in each case.

Revisions to the Washington State Department of Transportation Materials Manual or revisions to other Specifications or test methods such as AASHTO, ASTM, or Federal Specifications will be considered as in effect 60 calendar days after publication.

1-06.2(2) Statistical Evaluation of Materials for Acceptance**1-06.2(2)A General**

I Where specified, acceptance sampling and testing will be performed by the Contracting Agency and statistically evaluated for acceptance by the provisions of this subsection. All test results for a lot will be analyzed collectively and statistically by the quality level analysis procedures shown at the end of this subsection to determine the total percent of the lot that is within Specification limits and to determine an appropriate pay factor. Lots and sublots are defined in the appropriate subsection of these Specifications for the material being statistically evaluated.

Quality level analysis is a statistical procedure for determining the percent compliance of the material with these Specifications. Quality level is the computed percent of material meeting these Specifications and is determined from the arithmetic mean, (X_m), and the sample standard deviation (S), for each constituent of the lot.

Any necessary rounding off of test results or calculations will be accomplished according to the individual testing procedure, or, if not defined in the procedure then accomplished according to the following rule:

1. The final significant digit will not be changed when the succeeding digit is less than 5.
2. The final significant digit will be increased by one when the succeeding digit is 5 or greater.

Table 1
Estimated Percent of Work Within Specification Limits

Estimated Percent Within Specification Limits (P _u or P _L)	Upper Quality Index Q _u or Lower Quality Index Q _L														
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
100	1.16	1.49	1.72	1.88	1.99	2.07	2.13	2.20	2.28	2.34	2.39	2.44	2.48	2.51	2.56
99	-	1.46	1.64	1.75	1.82	1.88	1.91	1.96	2.01	2.04	2.07	2.09	2.12	2.14	2.16
98	-	1.43	1.58	1.66	1.72	1.75	1.78	1.81	1.84	1.87	1.89	1.91	1.93	1.94	1.95
97	1.15	1.40	1.52	1.59	1.63	1.66	1.68	1.71	1.73	1.75	1.76	1.78	1.79	1.80	1.81
96	-	1.37	1.47	1.52	1.56	1.58	1.60	1.62	1.64	1.65	1.66	1.67	1.68	1.69	1.70
95	1.14	1.34	1.42	1.47	1.49	1.51	1.52	1.54	1.55	1.56	1.57	1.58	1.59	1.59	1.60
94	-	1.31	1.38	1.41	1.43	1.45	1.46	1.47	1.48	1.49	1.50	1.50	1.51	1.51	1.52
93	1.13	1.28	1.33	1.36	1.38	1.39	1.40	1.41	1.41	1.42	1.43	1.43	1.44	1.44	1.44
92	1.12	1.25	1.29	1.31	1.33	1.33	1.34	1.35	1.35	1.36	1.36	1.37	1.37	1.37	1.38
91	1.11	1.22	1.25	1.27	1.28	1.28	1.29	1.29	1.30	1.30	1.30	1.31	1.31	1.31	1.31
90	1.10	1.19	1.21	1.23	1.23	1.24	1.24	1.24	1.25	1.25	1.25	1.25	1.25	1.26	1.26
89	1.09	1.16	1.18	1.18	1.19	1.19	1.19	1.19	1.20	1.20	1.20	1.20	1.20	1.20	1.20
88	1.07	1.13	1.14	1.14	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
87	1.06	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.11	1.11	1.11	1.11	1.11	1.11	1.11
86	1.04	1.07	1.07	1.07	1.07	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
85	1.03	1.04	1.03	1.03	1.03	1.03	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
84	1.01	1.01	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
83	0.99	0.98	0.97	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.94
82	0.97	0.95	0.93	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90
81	0.95	0.92	0.90	0.89	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
80	0.93	0.89	0.87	0.86	0.85	0.85	0.84	0.84	0.84	0.83	0.83	0.83	0.83	0.83	0.83
79	0.91	0.86	0.84	0.82	0.82	0.81	0.81	0.81	0.80	0.80	0.80	0.80	0.80	0.80	0.79
78	0.88	0.83	0.81	0.79	0.79	0.78	0.78	0.77	0.77	0.77	0.76	0.76	0.76	0.76	0.76
77	0.86	0.80	0.77	0.76	0.75	0.75	0.74	0.74	0.74	0.73	0.73	0.73	0.73	0.73	0.73
76	0.83	0.77	0.74	0.73	0.72	0.72	0.71	0.71	0.70	0.70	0.70	0.70	0.70	0.70	0.70
75	0.81	0.74	0.71	0.70	0.69	0.69	0.68	0.68	0.67	0.67	0.67	0.67	0.67	0.67	0.66

(Continued)

Table 1
Estimated Percent of Work Within Specification Limits (continued)

Estimated Percent Within Specification Limits (P ₀ or P _L)	Upper Quality Index Q _u or Lower Quality Index Q _L														
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
74	0.78	0.71	0.68	0.67	0.67	0.65	0.65	0.65	0.64	0.64	0.64	0.64	0.64	0.64	0.63
73	0.75	0.68	0.65	0.64	0.63	0.62	0.62	0.62	0.61	0.61	0.61	0.61	0.61	0.61	0.60
72	0.73	0.65	0.62	0.61	0.60	0.59	0.59	0.59	0.58	0.58	0.58	0.58	0.58	0.58	0.57
71	0.70	0.62	0.59	0.58	0.57	0.57	0.56	0.56	0.55	0.55	0.55	0.55	0.55	0.55	0.54
70	0.67	0.59	0.56	0.55	0.54	0.54	0.53	0.53	0.52	0.52	0.52	0.52	0.52	0.52	0.52
69	0.64	0.56	0.53	0.52	0.51	0.51	0.50	0.50	0.50	0.49	0.49	0.49	0.49	0.49	0.49
68	0.61	0.53	0.50	0.49	0.48	0.48	0.48	0.47	0.47	0.47	0.46	0.46	0.46	0.46	0.46
67	0.58	0.50	0.47	0.46	0.45	0.45	0.45	0.44	0.44	0.44	0.44	0.43	0.43	0.43	0.43
66	0.55	0.47	0.45	0.43	0.43	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.41	0.41	0.40
65	0.51	0.44	0.42	0.40	0.40	0.39	0.39	0.39	0.38	0.38	0.38	0.38	0.38	0.38	0.38
64	0.48	0.41	0.39	0.38	0.37	0.37	0.36	0.36	0.36	0.36	0.35	0.35	0.35	0.35	0.35
63	0.45	0.38	0.36	0.35	0.34	0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32
62	0.41	0.35	0.33	0.32	0.32	0.31	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.30
61	0.38	0.30	0.30	0.30	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
60	0.34	0.28	0.28	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
59	0.31	0.27	0.25	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
58	0.30	0.25	0.23	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
57	0.25	0.20	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
56	0.20	0.18	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
55	0.18	0.15	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
54	0.15	0.13	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
53	0.10	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
52	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
51	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 2
Pay Factors

PAY FACTOR	Minimum Required Percent of Work Within Specification Limits for a Given Factor ($P_u + P_v$) - 100														
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
1.05						100	100	100	100	100	100	100	100	100	100
1.04					100	99	97	95	96	96	96	97	97	97	97
1.03				100	98	96	94	92	93	93	94	95	95	96	96
1.02				99	97	94	91	89	90	91	92	93	93	94	94
1.01	100	100	100	98	95	92	89	87	88	89	90	91	92	92	93
1.00	69	75	78	80	82	83	84	85	86	87	88	89	90	91	92
0.99	66	72	76	78	80	81	82	83	84	85	86	87	89	90	91
0.98	64	70	74	76	78	79	80	81	82	84	85	86	87	88	90
0.97	63	68	72	74	76	77	78	79	81	82	83	84	86	87	88
0.96	61	67	70	72	74	75	76	78	79	81	82	83	84	86	87
0.95	59	65	68	71	72	74	75	76	78	79	80	82	83	84	86
0.94	58	63	67	69	71	72	73	75	76	78	79	80	82	83	85
0.93	57	62	65	67	69	71	72	73	75	76	78	79	80	82	84
0.92	55	60	63	66	68	69	70	72	73	75	76	78	79	81	82
0.91	54	59	62	64	66	68	69	70	72	74	75	76	78	79	81
0.90	53	57	61	63	65	66	67	69	71	72	74	75	77	78	80
0.89	51	56	59	62	63	65	66	68	69	71	72	74	75	77	79
0.88	50	55	58	60	62	64	65	66	68	70	71	73	74	76	78
0.87	49	53	57	59	61	62	63	65	67	68	70	71	73	75	77
0.86	48	52	55	58	59	61	62	64	66	67	69	70	72	74	76
Note: If the value of ($P_u + P_v$) - 100 does not correspond to a ($P_u + P_v$) - 100 value in this table, use the next smaller ($P_u + P_v$) - 100 value. (Continued)															
0.85	46	51	54	56	58	60	61	62	64	66	67	69	71	72	75
0.84	45	49	53	55	57	58	60	61	63	65	66	68	70	71	73
0.83	44	48	51	54	56	57	58	60	62	64	65	67	69	70	72
0.82	43	47	50	53	54	56	57	59	61	62	64	66	67	69	71
0.81	41	46	49	51	53	55	56	58	59	61	63	64	66	68	70

(Continued)

Table 2
Pay Factors (continued)

PAY FACTOR	Minimum Required Percent of Work Within Specification Limits for a Given Factor (P _u + P _L) – 100														
Category	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
0.85	46	51	54	56	58	60	61	62	64	66	67	69	71	72	75
0.84	45	49	53	55	57	58	60	61	63	65	66	68	70	71	73
0.83	44	48	51	54	56	57	58	60	62	64	65	67	69	70	72
0.82	43	47	50	53	54	56	57	59	61	62	64	66	67	69	71
0.81	41	46	49	51	53	55	56	58	59	61	63	64	66	68	70
0.80	40	44	48	50	52	54	55	56	58	60	62	63	65	67	69
0.79	39	43	46	49	51	52	54	55	57	59	61	62	64	66	68
0.78	38	42	45	48	50	51	52	54	56	58	59	61	63	65	67
0.77	36	41	44	46	48	50	51	53	55	57	58	60	62	64	66
0.76	35	39	43	45	47	49	50	52	54	56	57	59	61	63	65
0.75	33	38	42	44	46	48	49	51	53	54	56	58	60	62	64
REJECT	32	37	40	43	45	47	48	49	52	53	55	57	59	60	63
	30	36	39	42	44	45	47	48	50	52	54	56	57	59	62
	28	34	38	41	43	44	46	47	49	51	53	55	56	58	61
	27	33	37	39	42	43	45	46	48	50	52	53	55	57	60
	25	32	36	38	40	42	43	45	47	49	51	52	54	56	59
Values Less Than Those Shown Above															

Reject Quality Levels Less Than Those Specified for a 0.75 Pay Factor
Note: If the value of $(P_u + P_L) - 100$ does not correspond to a $(P_u + P_L) - 100$ value in this table, use the next smaller $(P_u + P_L) - 100$ value.

Values Less Than Those Shown Above

1-06.2(2)B Financial Incentive

As an incentive to produce superior quality material, a pay factor greater than 1.00 may be obtained with the maximum pay factor being 1.05. A lot containing non-Specification material will be accepted provided the Composite Pay Factor reaches the minimum value specified elsewhere. A lot containing non-Specification material which fails to obtain at least the specified minimum Composite Pay Factor will be rejected by the Engineer. The Engineer will take one or more of the following actions when rejected material has been incorporated into the Work:

1. Require complete removal and replacement with Specification material at no additional cost to the Contracting Agency.
2. At the Contractor's written request, allow corrective work at no additional cost to the Contracting Agency and then an appropriate price reduction that may range from no reduction to no payment.
3. At the Contractor's written request, allow material to remain in place with an appropriate price reduction that may range from a designated percentage reduction to no payment.

Any lot for which at least 3 samples have been obtained, and all of the test results meet one of the appropriate criteria listed below, will receive at least a 1.00 Composite Pay Factor:

1. All test results are within the allowable limits specified for the item, or
2. All test results that only have a lower Specification limit are greater than or equal to that limit, or
3. All test results that only have an upper Specification limit are less than or equal to that limit.

Computation of the quality level in these instances will be for determining the amount of any bonus that might be warranted.

Lots represented by less than 3 samples or unsampled lots will be exempt from statistical based acceptance.

1-06.2(2)C Removed and Rejected Materials

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material at no expense to the Contracting Agency. Any such new material will be sampled, tested, and evaluated for acceptance as a part of the subplot in accordance with this statistical sampling and testing procedure.

The Engineer may reject a subplot that tests show to be defective. Such rejected material shall not be used in the Work, and the results of tests run on the rejected material will not be included in the original lot acceptance tests.

1-06.2(2)D Quality Level Analysis**1-06.2(2)D1 General**

The quality level calculations for HMA and other materials are completed using the formulas in Section 1-06.2(2)D4. For HMA, the definition of the "x" value used in the calculations and the definition of the upper and lower specification limit are in Section 1-06.2(2)D2. For other materials, the definition of the "x" value used in the calculations and the definition of the upper and lower specification limit are in Section 1-06.2(2)D3. All other terms and variables are the same for all calculations.

1-06.2(2)D2 Hot Mix Asphalt

x = difference between an individual test value and the job mix formula (JMF)

USL = maximum allowable limit in Section 9-03.8(7)

LSL = minimum allowable limit in Section 9-03.8(7)

1-06.2(2)D3 Other Materials

x = individual test value

USL = upper specification limit

LSL = lower specification limit

1-06.2(2)D4 Quality Level Calculation

The procedures for determining the quality level and pay factors for a material are as follows:

1. Determine the arithmetic mean, X_m , for each specified material constituent:

$$X_m = \frac{\sum x}{n}$$

where: \sum = summation of x

n = total number test values

2. Compute the sample standard deviation, "S", for each constituent:

$$S = \left[\frac{n \sum x^2 - (\sum x)^2}{n(n-1)} \right]^{\frac{1}{2}}$$

where: $\sum x^2$ = summation of the squares of individual test values

$(\sum x)^2$ = summation of the individual test values squared

3. Compute the upper quality index, (Q_u), for each constituent:

$$Q_u = \frac{USL - X_m}{S}$$

4. Compute the lower quality index, (Q_L), for each constituent:

$$Q_L = \frac{X_m - LSL}{S}$$

5. For each constituent determine P_u (the percent within the upper Specification limit which corresponds to a given Q_u) from Table 1. If USL is 100.00 percent or is not specified, P_u will be 100. For negative values of Q_u , P_u (e.g. $N=15$ and $Q_u=-0.5$ will result in $P_u=30$) is equal to 100 minus the table P_u . If the value of Q_u does not correspond exactly to a figure in the table, use the next higher value.
6. For each constituent determine P_L (the percent within the lower Specification limit which corresponds to a given Q_L) from Table 1. If LSL is zero or not specified, P_L will be 100. For negative values of Q_L , P_L is equal to 100 minus the table P_L . If the value of Q_L does not correspond exactly to a figure in the table, use the next higher value.
7. For each constituent determine the quality level (the total percent within Specification limits):

$$\text{Quality Level} = (P_u + P_L) - 100$$

8. Using the quality level from step 7, determine the pay factor (PF_i) from Table 2 for each constituent tested.
9. Determine the Composite Pay Factor (CPF) for each lot.

$$CPF = \frac{f_1(PF_1) + f_2(PF_2) + \dots + f_i(PF_i)}{\sum f_i}$$

$$i = 1 \text{ to } j$$

where: f_i = price adjustment factor listed in these Specifications for the applicable material

j = number of constituents being evaluated

1-06.3 Manufacturer's Certificate of Compliance

When authorized by these Specifications or the Special Provisions and prior to use, the Engineer may accept certain materials on the basis of a Manufacturer's Certificate of Compliance as an alternative to material inspection and testing.

The Contractor may request, in writing, authority from the Engineer to install such materials prior to submitting the required certification; however, no payment will be made for the Work in the absence of an acceptable Manufacturer's Certificate of Compliance. The Contracting Agency reserves the right to deny the request for good cause. If for any reason the Contractor has not provided an acceptable Manufacturer's Certificate of Compliance by the Physical Completion Date established by Section 1-08.5, the Contracting Agency will assess the usefulness of the installed material. At the Engineer's discretion, the Contracting Agency will either require replacement of the material by the Contractor at no expense to the Contracting Agency or process the final payment as provided by Section 1-09.9 without paying for the materials or any portion of the Work performed to install the materials provided on such a basis. The unit Contract prices for the Work shall be used to determine the amount to be withheld. Where unit Contract prices do not exist, as in a lump sum item, the amount to be withheld shall be an equitable adjustment, covering labor, equipment and materials, determined in accordance with Section 1-09.4.

The Manufacturer's Certificate of Compliance must identify the manufacturer, the type and quantity of material being certified, the applicable Specifications being affirmed, and the signature of a responsible corporate official of the manufacturer and include supporting mill tests or documents. A Manufacturer's Certificate of Compliance shall be furnished with each lot of material delivered to the Work and the lot so certified shall be clearly identified in the certificate.

All materials used on the basis of a Manufacturer's Certificate of Compliance may be sampled and tested at any time. Any material not conforming to the requirements will be subject to rejection whether in place or not. The Contracting Agency reserves the right to refuse to accept materials on the basis of a Manufacturer's Certificate of Compliance.

1-06.4 Handling and Storing Materials

In storage and handling, the Contractor shall protect materials against damage from careless handling, from exposure to weather, from mixture with foreign matter, and from all other causes. The Engineer will reject and refuse to test materials improperly handled or stored.

The Contractor shall repair, replace, or make good all Contracting Agency-provided materials that are damaged or lost due to the Contractor's operation or while in the Contractor's possession, at no expense to the Contracting Agency.

1-06.5 Owners Manuals and Operating Instructions

For equipment and materials that are permanently incorporated in the Work, the Contractor shall provide to the Project Engineer all owners manuals and operating instructions furnished by the equipment or material manufacturer.

1-06.6 Vacant

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC**1-07.1 Laws to be Observed**

The Contractor shall always comply with all Federal, State, tribal or local laws, ordinances, and regulations that affect Work under the Contract. The Contractor shall indemnify, defend, and save harmless the State (including the Governor, Commission, Secretary, and any agents, officers, and employees) against any claims that may arise because the Contractor (or any employee of the Contractor or Subcontractor or materialperson) violated a legal requirement.

The Contractor shall be responsible to immediately report to the Engineer any deviation from the contract provisions pertaining to environmental compliance, including but not limited to spills, unauthorized fill in waters of the State including wetlands, water quality standards, noise, air quality, etc.

The Contractor shall be responsible for the safety of all workers and shall comply with all appropriate state safety and health standards, codes, rules, and regulations, including, but not limited to, those promulgated under the Washington Industry Safety and Health Act RCW Chapter 49.17 (WISHA) and as set forth in Title 296 WAC (Department of Labor and Industries). The Contractor shall likewise be obligated to comply with all federal safety and health standards, codes, rules, and regulations that may be applicable to the Contract Work.

U.S. Mine Safety and Health Administration rules apply when the project includes pit or quarry operations. Among other actions, these regulations require the Contractor to notify the nearest Mine Safety and Health sub district office (1) of the project before it begins, (2) of the starting date, and (3) of the Physical Completion Date.

Without usurping the authority of other agencies, the Contracting Agency will cooperate with them in their efforts to enforce legal requirements. Upon awareness of a violation of a legal requirement, the Engineer will notify the Contractor in an effort to achieve compliance. The Engineer may also notify the agency responsible for enforcement if the Engineer deems that action is necessary to achieve compliance with legal requirements. The Engineer will also assist the enforcement agency to obtain Contractor compliance to the extent such assistance is consistent with the provisions of the Contract.

The Contracting Agency will not adjust payment to compensate the Contractor for changes in legal requirements unless those changes are specifically within the scope of RCW 39.04.120. For changes under RCW 39.04.120, the Contracting Agency will compensate the Contractor by negotiated change order as provided in Section 1-04.4.

Under certain conditions, the Contracting Agency will adjust payment to compensate for tax changes. First, the changes shall involve federal or state taxes on materials or fuel used in or consumed for the project. Second, the changes shall increase or decrease Contractor-paid taxes by more than \$500. For items in the original Contract, the tax change must occur after the Bid opening date. For negotiated Contracts or items in a supplemental agreement, the tax change must take place after the execution date of the Contract or agreement. Within these conditions, the Contracting Agency will adjust compensation by the actual dollar amounts of increase or decrease caused by the tax changes. If the Engineer requests it, the Contractor shall certify in writing that the Contract price does not include any extra amount to cover a possible change in taxes.

The Contracting Agency may audit the records of the Contractor as provided in Section 1-09.12, to verify any claim for compensation because of changes in laws or taxes.

1-07.2 State Taxes

The Washington State Department of Revenue has issued special rules on the state sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Financial System Manager, Department of Transportation, Olympia, for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a Bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit Bid prices or other Contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage only if the Contractor has obtained from the State Department of Revenue a certificate showing that all Contract-related taxes have been paid (RCW 60.28.050). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the State Department of Revenue, whether the amount owed relates to this Contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax: Work Performed on City, County, or Federally-Owned Land

State Department of Revenue Rule 171 and its related rules apply for this section.

The Special Provisions of the Contract will identify those parts of the project that require Work on land owned by:

1. A municipal corporation,
2. A political subdivision of the State, or
3. The United States of America.

For Work performed on such land, the Contractor shall include Washington State retail sales taxes in the various unit Bid prices or other Contract amounts. These retail sales taxes shall include those the Contractor pays on purchases of materials, equipment, and supplies used or consumed in doing the Work.

1-07.2(2) State Sales Tax: Work on State-Owned or Private Land

State Department of Revenue Rule 170 and its related rules apply for this section.

The Special Provisions of the Contract will identify those parts of the project that require Work on State-owned or private land.

For Work performed on State-owned or private land, the Contractor shall collect from the Contracting Agency, retail sales tax on the full Contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit Bid prices or in any other Contract amount.

However, the Contracting Agency will not add in sales tax the Contractor (prime or Subcontractor) pays on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit Bid prices or in any other Contract amount whether the State owns the construction site or not.

1-07.2(3) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any Contract wholly for professional or other services (as defined in State Department of Revenue Rules 138 and 224).

1-07.3 Forest Protection and Merchantable Timber Requirements

1-07.3(1) Forest Fire Prevention

When the Work is in or next to State or Federal forests, the Contractor shall know and observe all laws and rules (State or Federal) on fire prevention and sanitation. The Contractor shall ask the local forest supervisor or regional manager to outline requirements for permits, sanitation, fire-fighting equipment, and burning.

The Contractor shall take all reasonable precautions to prevent and suppress forest fires. In case of forest fire, the Contractor shall immediately notify the nearest forest headquarters of its exact site and shall make every effort to suppress it. If needed, the Contractor shall require his/her employees and those of any Subcontractor to work under forest officials in fire-control efforts.

1-07.3(2) Merchantable Timber Requirements

When merchantable timber is to be cut, the Contractor shall obtain a permit from the appropriate regional office of the State Department of Natural Resources and comply fully with the State Forest Practices Act.

No person may export from the United States, or sell, trade, exchange, or otherwise convey to any other person for the purpose of export from the United States, timber originating from the project.

The Contractor shall comply with the Forest Resources Conservation and Shortage Relief Amendments Act of 1993, (Public Law 103-45), and the Washington State Log Export Regulations, (WAC 240-15).

1-07.4 Sanitation

1-07.4(1) General

The Contractor shall provide employees with all accommodations required by the State Department of Health and other agencies. These accommodations shall be kept clean, neat, and sanitized, and shall not create any public nuisance. The Contractor shall keep all campsites clean, properly dispose of all refuse, and leave each site in a neat and sanitary condition.

1-07.4(2) Health Hazards

Biological hazards and associated physical hazards may be present in the worksite. The Contractor shall take precautions and perform any necessary Work to provide and maintain a safe and healthful worksite in accordance with applicable laws. Payment for Work necessary to provide and maintain a safe worksite will be incidental to associated items of Contract Work unless the Contract includes provisions to the contrary.

1-07.5 Environmental Regulations

1-07.5(1) General

Throughout the Work, the Contractor shall comply with all current rules of the resource agencies having jurisdiction over the affected areas. Some, though not all, of these rules are summarized below. Any of these agencies may, without prejudice to the Contracting Agency, add rules as needed to protect game, fish, or the environment.

The Contractor shall be responsible to immediately report to the Engineer any deviation from the contract provisions pertaining to environmental compliance, including but not limited to spills, unauthorized fill in waters of the State including wetlands, water quality standards, noise, air quality, etc.

The following restrictions apply to all Work:

1. No Work shall occur within the jurisdictional areas unless authorized in the Contract Provisions and associated environmental permits.

2. No materials shall be placed below the ordinary high water line except as may be specified in the Contract.
3. No equipment shall enter waters of the State, except as may be specified in the Contract.

1-07.5(2) State Department of Fish and Wildlife

In doing the Work, the Contractor shall:

1. Not degrade water in a way that would harm fish. (Criteria: Washington State Water Quality Regulations.)
2. Release any fish stranded by the project into a flowing stream or open water.
3. Replant any stream bank or shoreline area if the project disturbs vegetative cover. Replanted trees, brush, or grasses shall resemble the type and density of surrounding growth, unless the Special Provisions permit otherwise.
4. Leave, when the Work is complete, an open-water channel at the lowest level of any isolated pothole to connect it with the main body of water.
5. Prevent any fish-threatening silt buildup on the bed or bottom of any body of water.
6. Never block stream flow or fish passage.
7. Never remove gravel or other bottom material from the high-water flow channel bed of any stream or from the bottom of any other body of water, except as may be permitted by the Special Provisions
8. Dispose of any project debris by removal, burning, or placement above high-water flows.
9. Immediately notify the Engineer and stop all work causing impacts, if at any time, as a result of project activities, fish are observed in distress or a fish kill occurs.

If the Work in (1) through (3) above differs little from what the Contract requires, the Contracting Agency will measure and pay for it at unit Contract prices. But if Contract items do not cover those areas, the Contracting Agency will pay pursuant to Section 1-09.4. Work in (4) through (8) above will be incidental to Contract pay items.

1-07.5(3) State Department of Ecology

In doing the Work, the Contractor shall:

1. Get a waste discharge permit from the Ecology Department before:
 - a. Washing aggregate; or
 - b. Discharging water from pit sites or excavations into a ground or surface waterway when the water contains turbidity, silt, or foreign materials.
2. Give the Project Engineer a copy of each waste discharge permit before the Work begins.
3. Control drainage and erosion in a manner that reduces waterway pollution.
4. Perform Work in such a manner that all materials and substances not specifically identified in the Contract documents to be placed in the water do not enter waters of the State, including wetlands. These include, but are not limited to, petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, paint, solvents, or other toxic or deleterious materials.
5. Use equipment that is free of external petroleum-based products.
6. Remove accumulations of soil and debris from drive mechanisms (wheels, tracks, tires) and undercarriage of equipment prior to using equipment below the ordinary high water line.

7. Clean loose dirt and debris from all materials placed below the ordinary high water line. No materials shall be placed below the ordinary high water line without the Engineer's approval.
8. Notify the Engineer and Ecology Department immediately should oil, chemicals, or sewage spill into waters of the State

1-07.5(4) Air Quality

The Contractor shall comply with all rules of local air pollution authorities. If there are none, air-quality rules of the State Department of Ecology shall govern the Work.

The Washington Clean Air Act requires that rock crushing, rock drilling, asphalt batch plants, and concrete plants receive an air quality permit in advance of the operation. The air quality permit process may include additional State Environment Policy Act (SEPA) requirements. Contractors or operators should contact the appropriate air pollution control authority well in advance of intended start-up. The permit process may require up to 30-days.

When the Work includes demolition of any existing facility, the Contractor shall comply with the requirements of the National Emission Standards for Asbestos. Any requirement included in state or Federal regulations on this subject that applies to the "owner or operator" shall be the responsibility of the Contractor.

1-07.6 Permits and Licenses

Contractors shall obtain all required permits and licenses and give any notices these call for.

The Contracting Agency will support the Contractor in efforts to obtain a temporary operating permit in its name if:

1. A local rule or an agency policy prevent issuing the permit to a private firm;
2. The Contractor takes all action to obtain the permit;
3. The permit will serve the public interest;
4. The permit applies only to Work under the Contract;
5. The Contractor agrees in writing: (a) to comply with all the issuing agency requires, and (b) to hold the Contracting Agency harmless for any Work-related liability incurred under the permit; and
6. The permit costs the Contracting Agency nothing.

1-07.7 Load Limits

1-07.7(1) General

While moving equipment or materials on any public Highway, the Contractor shall comply with all laws that control traffic or limit loads. The Contract neither exempts the Contractor from such laws nor licenses overloads. At the Engineer's request, the Contractor shall provide any facts needed to compute the equipment's weight on the Roadway.

When the Contractor moves equipment or materials within the project limits as shown in the Plans, legal load limits shall apply on:

1. Any road open to and in use by public traffic; or
2. Any existing road not scheduled for major reconstruction under the current Contract; or
3. Any newly paved road (with final lift in place) built under this Contract. The Contractor may haul overloads (not more than 25-percent above load limits) on such roads not open to public traffic if this does not damage completed Work. The Contractor shall pay all repair costs of any overload damage.

Elsewhere on the project, the Contractor may operate equipment with only the load-limit restrictions in 1, 2, and 3 in Section 1-07.7(2). The Contractor shall remain responsible, however, for all load-caused damage. All vehicles subject to license on a tonnage basis shall be licensed to maximum legal capacity before operating under these limits.

If necessary and safe to do so, and if the Contractor requests it in writing, the Engineer may approve higher load limits than those in the load-limit restrictions in 1, 2, and 3 in Section 1-07.7(2). The written request shall:

1. Describe loading details;
2. Describe the arrangement, movement, and position of equipment on the Structure or over culverts and pipes; and
3. State that the Contractor assumes all risk for damage.

Unit prices shall cover all costs for operating over bridges and culverts. Nothing in this section affects the Contractor's other responsibilities under these Specifications or under public Highway laws.

1-07.7(2) Load-Limit Restrictions

1. **Structures Designed for Direct Bearing of Live Loads.** The gross or maximum load on each vehicle axle shall not exceed the legal load limit by more than 35-percent. No more than one vehicle shall operate over any Structure at one time. The Contractor shall immediately remove any dirt, rock, or debris that may gather on the Structure's Roadway surface.

If the Contractor desires to utilize work methods resulting in load that exceed any of the restrictions described above, the Contractor shall submit calculations and other supporting information (as specified in Section 6-01.6 for bridges under construction) to the Engineer for approval in accordance with Sections 6-01.6 and 6-01.9. The Engineer will review the calculations and supporting information to determine if the loading meets the criteria specified in Section 6-01.6. The Contractor shall not place or operate construction vehicles or equipment on or over the Structure until receiving the Engineer's approval of the submittal.

2. **Underpasses and Reinforced Concrete Box Culverts Under Embankments.** Loads shall not exceed 24,000-pounds on a single axle and 16,000-pounds each on tandem axles spaced less than 10-feet apart. These limits are permitted only if the embankment has: (a) been built to Specifications, and (b) reached at least 3-feet above the top of the underpass or culvert.

When the embankment has reached 5-feet above the top of the underpass or culvert, the Contractor may increase per-axle loads up to 100,000-pounds if outside wheel spacing is at least 7-feet on axle centers.

3. **Pipe Culverts and Sewer Pipes.** Loads over pipe culverts and sewer pipes shall not exceed 24,000-pounds on a single axle and 16,000-pounds each on tandem axles spaced less than 10-feet apart. These limits are permitted only if: (a) the culvert or pipe has been installed and backfilled to Specifications, and (b) the embankment has reached at least 2-feet above the top limit of pipe compaction.

When the embankment has reached 5-feet above the top limit of pipe compaction, the Contractor may increase per-axle loads up to 100,000-pounds if outside wheel spacing is at least 7-feet on axle centers, except that:

- a. For Class III reinforced concrete pipes, the embankment shall have risen above the top limit of compaction at least 6-feet.
- b. For Class II reinforced concrete pipes, the maximum load for each axle shall be 80,000-pounds if outside wheel spacing is at least 7-feet on axle

centers. In this case, the embankment shall have risen above the top limit of compaction at least 6-feet.

1-07.8 High-Visibility Apparel

The Contractor shall require all personnel under their control (including service providers, Subcontractors, and lower tier subcontractors) that are on foot in the work zone and are exposed to vehicle traffic or construction equipment to wear the high-visibility apparel described in this Section.

The Contractor shall ensure that a competent person as identified in the MUTCD selects the appropriate high-visibility apparel suitable for the jobsite conditions.

High-visibility garments shall always be the outermost garments.

High-visibility garments shall be in a condition compliant with the ANSI 107-2004 and shall be used in accordance with manufacturer recommendations.

1-07.8(1) Traffic Control Personnel

All personnel performing the Work described in Section 1-10 (including traffic control supervisors, flaggers, spotters, and others performing traffic control labor of any kind) shall comply with the following:

1. During daylight hours with clear visibility, workers shall wear a high-visibility ANSI/ISEA 107-2004 Class 2 or 3 vest or jacket, and hardhat meeting the high-visibility headwear requirements of WAC 296-155-305; and
2. During hours of darkness ($\frac{1}{2}$ -hour before sunset to $\frac{1}{2}$ -hour after sunrise) or other low-visibility conditions (snow, fog, etc.), workers shall wear a high-visibility ANSI/ISEA 107-2004 Class 2 or 3 vest or jacket, high-visibility lower garment meeting ANSI/ISEA 107-2004 Class E, and hardhat meeting the high-visibility headwear requirements of WAC 296-155-305.

1-07.8(2) Non-Traffic Control Personnel

All personnel, except those performing the Work described in Section 1-10, shall wear high-visibility apparel meeting the ANSI/ISEA 107-2004 Class 2 or 3 standard.

1-07.9 Wages

1-07.9(1) General

This Contract is subject to the minimum wage requirements of RCW 39.12 and to RCW 49.28 (as amended or supplemented). On Federal-aid projects, Federal wage laws and rules also apply. The hourly minimum rates for wages and fringe benefits are listed in the Contract Provisions. When Federal wage and fringe benefit rates are listed, the rates match those identified by the U.S. Department of Labor's "Decision Number" shown in the Contract Provisions.

The Contractor, any Subcontractor, and all individuals or firms required by RCW 39.12, WAC 296-127, or the Federal Davis-Bacon and Related Acts (DBRA) to pay minimum prevailing wages, shall not pay any worker less than the minimum hourly wage rates and fringe benefits required by RCW 39.12 or the DBRA. Higher wages and benefits may be paid.

By including the hourly minimum rates for wages and fringe benefits in the Contract Provisions, the Contracting Agency does not imply that the Contractor will find labor available at those rates. The Contractor shall be responsible for any amounts above the minimums that will actually have to be paid. The Contractor shall bear the cost of paying wages above those shown in the Contract Provisions.

When the project is subject to both State and Federal hourly minimum rates for wages and fringe benefits and when the two rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate unless the State rates are specifically

preempted by Federal law. When the project involves both Highway Work and building Work, the Contract Provisions may list a Federal wage and fringe benefit rate for the Highway Work and a separate Federal wage and fringe benefit rate for the building Work. The area in which the worker is physically employed shall determine which Federal wage and fringe benefit rate shall be used to compare against the State wage and fringe benefit rate.

If employing labor in a class not listed in the Contract Provisions on state funded projects only, the Contractor shall request a determination of the correct wage and benefits rate for that class and locality from the Industrial Statistician, Washington State Department of Labor and Industries (State L&I), and provide a copy of those determinations to the Project Engineer.

If employing labor in a class not listed in the Contract Provisions on federally funded projects, the Contractor shall request a determination of the correct wage and benefit for that class and locality from the U. S. Secretary of Labor through the Project Engineer. Generally, the Contractor initiates the request by preparing standard form 1444 Request for Authorization of Additional Classification and Rate, available at <http://www.wdol.gov/docs/sf1444.pdf>, and submitting it to the Project Engineer for further action.

The Contractor shall ensure that any firm (Supplier, Manufacturer, or Fabricator) that falls under the provisions of RCW 39.12 because of the definition "Contractor" in WAC 296-127-010, complies with all the requirements of RCW 39.12.

The Contractor shall be responsible for compliance with the requirements of the DBRA and RCW 39.12 by all firms (Subcontractors, lower tier subcontractors, Suppliers, Manufacturers, or Fabricators) engaged in any part of the Work necessary to complete this Contract. Therefore, should a violation of this subsection occur by any firm that is providing Work or materials for completion of this Contract whether directly or indirectly responsible to the Contractor, the Contracting Agency will take action against the Contractor, as provided by the provisions of the Contract, to achieve compliance, including but not limited to, withholding payment on the Contract until compliance is achieved.

In the event the Contracting Agency has an error (omissions are not errors) in the listing of the hourly minimum rates for wages and fringe benefits in the Contract Provisions, the Contractor, any Subcontractor, any lower tier subcontractor, or any other firm that is required to pay prevailing wages, shall be required to pay the rates as determined to be correct by State L&I (or by the U.S. Department of Labor when that agency sets the rates). A change order will be prepared to ensure that this occurs. The Contracting Agency will reimburse the Contractor for the actual cost to pay the difference between the correct rates and the rates included in the Contract Provisions, subject to the following conditions:

1. The affected firm relied upon the rates included in the Contract Provisions to prepare its Bid and certifies that it did so;
2. The allowable amount of reimbursement will be the difference between the rates listed and rates later determined to be correct plus only appropriate payroll markup the employer must pay, such as, social security and other payments the employer must make to the Federal or State Government;
3. The allowable amount of reimbursement may also include some overhead cost, such as, the cost for bond, insurance, and making supplemental payrolls and new checks to the employees because of underpayment for previously performed Work; and
4. Profit will not be an allowable markup.

Firms that anticipated, when they prepared their Bids, paying a rate equal to, or higher than, the correct rate as finally determined will not be eligible for reimbursement.

Listing Recovery Act (and other) new hire opportunities with the Employment Security Department.

There are many talented people currently unemployed. As the signs on the Contracting Agency's projects advertise, the Recovery Act is about creating jobs and putting people back to work. As a companion effort, the Employment Security Department has been charged with giving people the opportunity to compete for these jobs. Their tool for doing so is WorkSource. WorkSource is a free service located across the State that screens, shortlists, and refers qualified candidates.

WorkSource employees are aware that the Contractor has other commitments as part of your business practices and as part of the Contract. Contractors may be subject to hiring commitments such as Equal Employment Opportunity or union commitments. However, utilizing WorkSource can be an essential effort as part of their various good faith efforts.

WorkSource is a resource that is available across the State. Contractors who have been awarded WSDOT Contracts shall be prepared to discuss their recruitment plans and how WorkSource will be incorporated into that effort at the preconstruction conference. WorkSource has a simple process for requesting and reporting new hires.

The Contractor may contact the ARRA Business Unit at 877-453-5906 (toll free) or ARRA@esd.wa.gov. There is additional information available on the website: <https://fortress.wa.gov/esd/worksource/>

1-07.9(2) Posting Notices

In a location acceptable to State L&I, the Contractor shall ensure the following is posted:

1. One copy of the approved "Statement of Intent to Pay Prevailing Wages" for the Contractor, each Subcontractor, each lower tier subcontractor, and any other firm (Supplier, Manufacturer, or Fabricator) that falls under the provisions of RCW 39.12 because of the definition of "Contractor" in WAC 296-127-010;
2. One copy of the prevailing wage rates for the project;
3. The address and telephone number of the Industrial Statistician for State L&I (along with notice that complaints or questions about wage rates may be directed there); and
4. FHWA 1495/1495A "Wage Rate Information" poster if the project is funded with Federal-aid.

1-07.9(3) Apprentices

If employing apprentices, the Contractor shall submit to the Engineer written evidence showing:

1. Each apprentice is enrolled in a program approved by the Washington State Apprenticeship and Training Council;
2. The progression schedule for each apprentice; and
3. The established apprentice-journey level ratios and wage rates in the project locality upon which the Contractor will base such ratios and rates under the Contract. Any worker for whom an apprenticeship agreement has not been registered and approved by the Washington State Apprenticeship and Training Council shall be paid at the prevailing hourly journey level rate as provided in RCW 39.12.021.

1-07.9(4) Disputes

If labor and management cannot agree in a dispute over the proper prevailing wage rates, the Contractor shall refer the matter to the Director of State L&I (or to the U.S. Secretary of Labor when that agency sets the rates). The Director's (or Secretary's) decision shall be final, conclusive, and binding on all parties.

1-07.9(5) Required Documents

On forms provided by the Industrial Statistician of State L&I, the Contractor shall submit to the Engineer the following for itself and for each firm covered under RCW 39.12 that provided Work and materials for the Contract:

1. A copy of an approved "Statement of Intent to Pay Prevailing Wages" State L&I's form number F700-029-000. The Contracting Agency will make no payment under this Contract for the Work performed until this statement has been approved by State L&I and a copy of the approved form has been submitted to the Engineer.
2. A copy of an approved "Affidavit of Prevailing Wages Paid," State L&I's form number F700-007-000. The Contracting Agency will not release to the Contractor any funds retained under RCW 60.28.011 until all of the "Affidavit of Prevailing Wages Paid" forms have been approved by State L&I and a copy of all the approved forms have been submitted to the Engineer.

The Contractor shall be responsible for requesting these forms from State L&I and for paying any approval fees required by State L&I.

Certified payrolls are required to be submitted by the Contractor to the Engineer, for the Contractor and all Subcontractors or lower tier subcontractors, on all Federal-aid projects and, when requested in writing by the Engineer, on projects funded with only Contracting Agency funds. If these payrolls are not supplied within ten calendar days of the end of the preceding weekly payroll period for Federal-aid projects or within ten calendar days from the date of the written request on projects with only Contracting Agency funds, any or all payments may be withheld until compliance is achieved. Also, failure to provide these payrolls could result in other sanctions as provided by State laws (RCW 39.12.050) and/or Federal regulations (29 CFR 5.12). All certified payrolls shall be complete and explicit. Employee labor descriptions used on certified payrolls shall coincide exactly with the labor descriptions listed on the minimum wage schedule in the Contract unless the Engineer approves an alternate method to identify the labor used by the Contractor to compare with the labor listed in the Contract Provisions. When an apprentice is shown on the certified payroll at a rate less than the minimum prevailing journey wage rate, the apprenticeship registration number for that employee from the State Apprenticeship and Training Council shall be shown along with the correct employee classification code.

1-07.9(6) Audits

The Contracting Agency may inspect or audit the Contractor's wage and payroll records as provided in Section 1-09.12.

1-07.10 Worker's Benefits

The Contractor shall make all payments required for unemployment compensation under Title 50 RCW and for industrial insurance and medical aid required under Title 51 RCW. If any payment required by Title 50 or Title 51 is not made when due, the Contracting Agency may retain such payments from any money due the Contractor and pay the same into the appropriate fund. Such payment will be made only after giving the Contractor 15 days prior written notice of the Contracting Agency's intent to disburse the funds to the Washington State Department of Labor and Industries or Washington State Employment Security Department as applicable. The payment will be made upon expiration of the 15-calendar day period if no legal action has been commenced to resolve the validity of the claim. If legal action is instituted to determine the validity of the claim prior to the expiration of the 15-day period, the Contracting Agency will hold the funds until determination of the action or written settlement agreement of the appropriate parties.

For Work on or adjacent to water, the Contractor shall make the determination as to whether workers are to be covered under the Longshoremen's and Harbor Worker's Compensation Act administered by the U.S. Department of Labor, or the State Industrial Insurance coverage administered by the Washington State Department of Labor and Industries.

The Contractor shall include in the various items in the Bid Proposal all costs for payment of unemployment compensation and for providing either or both of the insurance coverages. The Contractor will not be entitled to any additional payment for: (1) failure to include such costs, or (2) determinations made by the U.S. Department of Labor or the Washington State Department of Labor and Industries regarding the insurance coverage.

The Public Works Contract Division of the Washington State Department of Labor and Industries will provide the Contractor with applicable industrial insurance and medical aid classification and premium rates. After receipt of a *Revenue Release* from the Washington State Department of Revenue, the Contracting Agency will verify through the Department of Labor and Industries that the Contractor is current with respect to the payments of industrial insurance and medical aid premiums.

1-07.11 Requirements For Nondiscrimination

1-07.11(1) General Application

Discrimination in all phases of contracted employment, contracting activities and training is prohibited by Title VI of the Civil Rights Act of 1964, Section 162(a) of the Federal-Aid Highway Act of 1973, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Justice System Improvement Act of 1979, the American with Disabilities Act of 1990, the Civil Rights Restoration Act of 1987, 49 CFR Part 21, RCW 49.60 and other related laws and statutes. The referenced legal citations establish the minimum requirements for affirmative action efforts and define the basic nondiscrimination provisions as required by this section of these Standard Specifications.

1-07.11(2) Contractual Requirements

1. The Contractor shall not discriminate against any employee or applicant for contracted employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory or mental disability.
2. The Contractor shall, in all solicitations or advertisements for employees, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.
3. The Contractor shall insert the following notification in all solicitations for bids for Work or material subject to federal laws and regulations and made in connection with all program and activities and, in adapted form in all proposals for negotiated agreements:

The Contractor in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat.252, 42 U.S. Code 2000d to 2000d-4, and Title 49 Code of Federal Regulations, Part 21, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color national origin and sex in consideration for an award.

4. The Contractor shall make decisions with regard to selection and retention of sub Contractors, procurement of materials and equipment and similar actions related to the Contract without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.
5. The Contractor shall send to each labor union, employment agency, or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency or worker's representative, of the Contractor's commitments under this Contract with regard to nondiscrimination.
6. The Contractor shall permit access to its books, records and accounts by the Contracting Agency for the purpose of investigating to ascertain compliance with these Specifications. In the event that information required of a Contractor is in the possession of another who fails or refuses to furnish this information, the Contractor shall describe, in writing, what efforts were made to obtain the information.
7. The Contractor shall maintain records with the name and address of each minority/female worker referred to the Contractor and what action was taken with respect to the referred worker.
8. The Contractor shall notify the Contracting Agency whenever the union with which the Contractor has a collective bargaining agreement has impeded the Contractor's efforts to effect minority/female workforce utilization. This being the case, the Contractor shall show what relief they have sought under such collective bargaining agreements.
9. The Contractor is encouraged to participate in Contracting Agency and Washington State Human Rights Commission approved program(s) designed to train craft-workers for the construction trades.

1-07.11(2)A Equal Employment Opportunity (EEO) Responsibilities

Title VI Responsibilities

During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

1. **Compliance With Regulations.** The Contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter DOT), Title 49, Code of Federal Regulations, part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Contract.
2. **Nondiscrimination.** The Contractor, with regard to the Work performed by it during the Contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of Subcontractors, including procurement of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.
3. **Solicitations for Subcontracts, Including Procurement of Materials and Equipment.** In all solicitations either by competitive bidding or negotiations made by the Contractor for Work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential Subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Contract and the Regulations relative to nondiscrimination on the ground of race, color, sex, or national origin.

4. **Information and Reports.** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Washington State Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the Washington State Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance.** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the Washington State Department of Transportation shall impose such Contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the Contractor under the Contract until the Contractor complies, and/or;
 - b. Cancellation, termination, or suspension of the Contract, in whole or in part.
6. **Incorporation of Provisions.** The Contractor shall include the provisions of paragraphs (1) through (5) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any Subcontractor or procurement as the Washington State Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance.

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or supplier as a result of such direction, the Contractor may request the Washington State Department of Transportation enter into such litigation to protect the interests of the state and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

1-07.11(3) Equal Employment Opportunity Officer

The Contractor shall officially designate and make known to the Engineer during the preconstruction meetings and discussions the firm's Equal Employment Opportunity Officer (hereinafter referred to as the EEO Officer). The EEO Officer will also be responsible for making him/herself known to each of the Contractor's employees. The EEO Officer must possess the responsibility, authority, and capability for administering and promoting an active and effective Contractor program of equal employment opportunity.

1-07.11(4) Dissemination of Policy

1-07.11(4)A Supervisory Personnel

All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, shall be made fully cognizant of, and shall implement the Contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions shall be taken as a minimum:

1. **EEO Meetings.** Periodic meetings of supervisory and personnel office employees shall be conducted before the start of Work and then not less often than once every 6-months, at which time the Contractor's equal employment opportunity policy and its implementation shall be reviewed and explained. The meetings shall be conducted by the EEO Officer or other knowledgeable company official.
2. **EEO Indoctrination.** All new supervisory or personnel office employees shall be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the Contractor's equal employment opportunity obligations within 30-days following their reporting for duty with the Contractor.
3. **Internal EEO Procedures.** All personnel who are engaged in direct recruitment for the project shall be instructed by the EEO Officer or appropriate company official in the Contractor's procedures for locating and hiring minority group and female employees.

1-07.11(4)B Employees, Applicants, and Potential Employees

In order to make the Contractor's equal employment opportunity policy known to all employees, prospective employees, and potential sources of employees, e.g., schools, employment agencies, labor unions (where appropriate), college placement officers, community organizations, etc., the Contractor shall take the following actions:

1. **Notices and Posters.** Notices and posters setting forth the Contractor's equal employment opportunity policy shall be placed in areas readily accessible to employees, applicants for employment, and potential employees.
2. **EEO Indoctrination.** The Contractor's equal employment opportunity policy and the procedures to implement such policy shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

1-07.11(5) Sanctions

In the event of the Contractor is found in noncompliance with the provisions of Section 1-07.11, the Contracting Agency may impose such Contract sanctions as it or the Federal Highway Administration may determine necessary to gain compliance including, but not limited to:

1. Progress payment requests may not be honored until the noncompliance is remedied to the satisfaction of the Contracting Agency.
2. The Contract may be suspended, in whole or in part, until such time as the Contractor is determined to be in compliance by the Contracting Agency.
3. The Contractor's pre-qualification may be suspended or revoked pursuant to WAC 468-16. The Contracting Agency may refer the matter to the Federal Highway Administration (FHWA) for possible federal sanctions.
4. The Contract may be terminated.

1-07.11(6) Incorporation of Provisions

The Contractor shall include the provisions of Section 1-07.11(2) Contractual Requirements (1) through (4) and the Section 1-07.11(5) Sanctions in every subcontract including procurement of materials and leases of equipment. The Contractor shall take such action or enforce sanctions with respect to a Subcontractor or supplier as the Contracting Agency or the FHWA may direct as a means of enforcing such provisions. In the event a Contractor becomes involved in litigation with a Subcontractor or supplier as a result of such direction, the Contractor may request the Contracting Agency enter into such litigation to protect their interests and the Contracting Agency may request the federal government to enter into such litigation to protect the interests of the United States.

1-07.11(7) Vacant**1-07.11(8) Vacant****1-07.11(9) Subcontracting, Procurement of Materials, and Leasing of Equipment**

Nondiscrimination. The Contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age, or disability in the selection and retention of Subcontractors, including procurement of materials and leases of equipment.

Solicitation and Utilization. The Contractor shall use their best effort to solicit bids from, and to utilize, disadvantaged, minority, and women Subcontractors, or Subcontractors with meaningful minority and women representation among their employees.

Subcontractor EEO Obligations. The Contractor shall notify all potential Subcontractors and suppliers of the EEO obligations required by the Contract. The Contractor shall use their efforts to ensure Subcontractors compliance with their equal employment opportunity obligations.

1-07.11(10) Records and Reports**1-07.11(10)A General**

The Contractor shall keep such records as are necessary to determine compliance with the Contractor's equal employment opportunity obligations. The records kept by the Contractor shall be designated to indicate:

1. **Work Force Data.** The number of minority and nonminority group members and women employed in each work classification on the project.
2. **Good Faith Efforts — Unions.** The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force).
3. **Good Faith Efforts — Recruitment.** The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees.
4. **Subcontracting.** The progress and efforts being made in securing the services of disadvantaged, minority, and women Subcontractors or Subcontractors with meaningful minority and female representation among their employees.

1-07.11(10)B Required Records and Retention

All records must be retained by the Contractor for a period of three years following acceptance of the Contract Work. All records shall be available at reasonable times and places for inspection by authorized representatives of either the Washington State Department of Transportation or the Federal Highway Administration.

Federal-Aid Highway Construction Contractors Annual EEO Report

FHWA #1391. This form is required for all federally assisted projects provided the Contract is equal to or greater than \$10,000 and for every associated subcontract equal to or greater than \$10,000. Each Contract requires separate reports filed for the Contractor and each Subcontractor (subject to the above noted criteria). These forms are due by August 25th in every year during which Work was performed in July. The payroll period to be reflected in the report is the last payroll period in July in which Work was performed. This report is required of each Contractor and Subcontractor for each federally assisted Contract on which the Contractor or Subcontractor performs Work during the month of July.

Monthly Employment Utilization Reports

WSDOT Form #820-010. This form (or substitute form as approved by the Contracting Agency) is required for all federally assisted projects if the Contract is equal to or greater than \$10,000 and for every associated subcontract equal to or greater than \$10,000. These monthly reports are to be maintained in the respective Contractor or Subcontractor's records.

1-07.12 Federal Agency Inspection

Federal laws, rules, and regulations shall be observed by the Contractor on Federal-aid projects. This Work is subject to inspection by the appropriate Federal agency. The Contractor shall cooperate with the Federal agencies in these inspections. These inspections shall not make the Federal Government a party to the Contract and shall not constitute an interference with the rights of the Contracting Agency or the Contractor.

1-07.13 Contractor's Responsibility for Work

1-07.13(1) General

All Work and material for the Contract, including any change order Work, shall be at the sole risk of the Contractor until the entire improvement has been completed as determined by the Engineer, except as provided in this section.

The Contractor shall rebuild, repair, restore, and make good all damages to any portion of the permanent or temporary Work occurring before the Physical Completion Date and shall bear all the expense to do so, except damage to the permanent Work caused by: (a) acts of God, such as earthquake, floods, or other cataclysmic phenomenon of nature, or (b) acts of the public enemy or of governmental authorities; or (c) slides in cases where Section 2-03.3(11) is applicable; Provided, however, that these exceptions shall not apply should damages result from the Contractor's failure to take reasonable precautions or to exercise sound engineering and construction practices in conducting the Work.

If the performance of the Work is delayed as a result of damage by others, an extension of time will be evaluated in accordance with Section 1-08.8.

Nothing contained in this section shall be construed as relieving the Contractor of responsibility for, or damage resulting from, the Contractor's operations or negligence, nor shall the Contractor be relieved from full responsibility for making good any defective Work or materials as provided for under Section 1-05.

1-07.13(2) Relief of Responsibility for Completed Work

Upon written request, the Contractor may be relieved of the duty of maintaining and protecting certain portions of the Work, as described below, which have been completed in all respects in accordance with the requirements of the Contract. If the Engineer provides written approval, the Contractor will be relieved of the responsibility for damage to said completed portions of the Work resulting from use by public traffic or from the action of the elements or from any other cause, but not from damage resulting from the Contractor's operations or negligence.

Portions of the Work for which the Contractor may be relieved of the duty of maintenance and protection as provided in the above paragraph include but are not limited to the following:

1. The completion of ¼-mile of Roadway or ¼-mile of one Roadway of a divided Highway or a frontage road including the Traveled Way, Shoulders, drainage control facilities, planned Roadway protection Work, lighting, and any required traffic control and access facilities.

2. A bridge or other Structure of major importance.
3. A complete unit of a traffic control signal system or of a Highway lighting system.
4. A complete unit of permanent Highway protection Work.
5. A building that is functionally complete and open to the public.
6. Any Contract Proposal item.

1-07.13(3) Relief of Responsibility for Damage by Public Traffic

When it is necessary for public traffic to utilize a Highway facility during construction, the Contractor will be relieved of responsibility for damages to permanent Work by public traffic under the following circumstances:

1. The Work is in accordance with the Contract Plans or approved stage construction plans,
2. The Work is on a section of Roadway required by the Contract to be opened to public traffic, and
3. The traffic control is in accordance with the approved traffic control plans.

If traffic is relocated to another section of Roadway, the Contractor shall resume responsibility for the Work until such time as the section of Roadway is again open to public traffic or the Contractor submits a written request for Work that is completed to a point where relief can be granted in accordance with Section 1-07.13(2).

1-07.13(4) Repair of Damage

The Contractor shall promptly repair all damage to either temporary or permanent Work as ordered by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2) or 1-07.13(3), payment will be made in accordance with Section 1-09.4 using the estimated Bid item "Reimbursement for Third Party Damage".

In the event the Contracting Agency pays for damage to the Contractor's Work or for damage to the Contractor's equipment caused by third parties, any claim the Contractor had or may have had against the third party shall be deemed assigned to the Contracting Agency, to the extent of the Contracting Agency's payment for such damage.

Payment will be limited to repair of damaged Work only. No payment will be made for delay or disruption of Work.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount for "Reimbursement For Third Party Damage" in the Proposal to become a part of the total Bid by the Contractor.

1-07.14 Responsibility for Damage

The State, Governor, Commission, Secretary, and all officers and employees of the State, including but not limited to those of the Department, will not be responsible in any manner: for any loss or damage that may happen to the Work or any part; for any loss of material or damage to any of the materials or other things used or employed in the performance of Work; for injury to or death of any persons, either workers or the public; or for damage to the public for any cause which might have been prevented by the Contractor, or the workers, or anyone employed by the Contractor.

The Contractor shall be responsible for any liability imposed by law for injuries to, or the death of, any persons or damages to property resulting from any cause whatsoever during the performance of the Work, or before final acceptance.

Subject to the limitations in this section, the Contractor shall indemnify, defend, and save harmless the State, Governor, Commission, Secretary, and all officers and employees of the State from all claims, suits, or actions brought for injuries to, or death of, any persons or damages resulting from construction of the Work or in consequence

of any negligence regarding the Work, the use of any improper materials in the Work, caused in whole or in part by any act or omission by the Contractor or the agents or employees of the Contractor during performance or at any time before final acceptance. In addition to any remedy authorized by law, the State may retain so much of the money due the Contractor as deemed necessary by the Engineer to ensure indemnification until disposition has been made of such suits or claims.

Subject to the limitations in this section, the Contractor shall indemnify, defend, and save harmless any county, city, or region, its officers, and employees connected with the Work, within the limits of which county, city, or region the Work is being performed, all in the same manner and to the same extent as provided above for the protection of the State, its officers and employees, provided that no retention of money due the Contractor be made by the State except as provided in RCW 60.28, pending disposition of suits or claims for damages brought against the county, city, or district.

The Contractor will not be required to indemnify, defend, or save harmless the indemnitee as provided in the preceding paragraphs of this section if the claim, suit, or action for injuries, death, or damages is caused by the sole negligence of the indemnitee. Where such claims, suits, or actions result from the concurrent negligence of (a) the indemnitee or the indemnitee's agents or employees and (b) the Contractor or the Contractor's agent or employees, the indemnity provisions provided in the preceding paragraphs of this section shall be valid and enforceable only to the extent of the Contractor's negligence or the negligence of its agents and employees.

The Contractor shall bear sole responsibility for damage to completed portions of the project and to property located off the project caused by erosion, siltation, runoff, or other related items during the construction of the project. The Contractor shall also bear sole responsibility for any pollution of rivers, streams, ground water, or other waters that may occur as a result of construction operations.

The Contractor shall exercise all necessary precautions throughout the life of the project to prevent pollution, erosion, siltation, and damage to property.

The Contracting Agency will forward to the Contractor all claims filed against the State according to RCW 4.92.100 that are deemed to have arisen in relation to the Contractor's Work or activities under this Contract, and, in the opinion of the Contracting Agency, are subject to the defense, indemnity, and insurance provisions of these Standard Specifications. Claims will be deemed tendered to the Contractor and insurer, who has named the State as a named insured or an additional insured under the Contract's insurance provisions, once the claim has been forwarded via certified mail to the Contractor. The Contractor shall be responsible to provide a copy of the claim to the Contractor's designated insurance agent who has obtained/met the Contract's insurance provision requirements.

Within 60-calendar days following the date a claim is sent by the Contracting Agency to the Contractor, the Contractor shall notify the Claimant and WSDOT (Risk Management Office, PO Box 47418, Olympia, WA 98504-7418) of the following:

- a. whether the claim is allowed or is denied in whole or in part, and, if so, the specific reasons for the denial of the individual claim, and if not denied in full, when payment has been or will be made to the claimant(s) for the portion of the claim that is allowed, or
- b. if resolution negotiations are continuing. In this event, status updates will be reported no longer than every 60-calendar days until the claim is resolved or a lawsuit is filed.

If the Contractor fails to provide the above notification within 60-calendar days, then the Contractor shall yield to the Contracting Agency sole and exclusive discretion to allow all or part of the claim on behalf of the Contractor, and the **Contractor shall**

be deemed to have **WAIVED any and all defenses, objections, or other avoidances to the Contracting Agency's allowance of the claim, or the amount allowed by the Contracting Agency**, under common law, constitution, statute, or the Contract and these Standard Specifications. If all or part of a claim is allowed, the Contracting Agency will notify the Contractor via certified mail that it has allowed all or part of the claim and make appropriate payments to the claimant(s) with State funds.

Payments of State funds by the Contracting Agency to claimant(s) under this section will be made on behalf of the Contractor and at the expense of the Contractor, and the Contractor shall be unconditionally obligated to reimburse the Contracting Agency for the "total reimbursement amount", which is the sum of the amount paid to the claimant(s), plus all costs incurred by the Contracting Agency in evaluating the circumstances surrounding the claim, the allowance of the claim, the amount due to the claimant, and all other direct costs for the Contracting Agency's administration and payment of the claim on the Contractor's behalf. The Contracting Agency will be authorized to withhold the total reimbursement amount from amounts due the Contractor, or, if no further payments are to be made to the Contractor under the Contract, the Contractor shall directly reimburse the Contracting Agency for the amounts paid within 30-days of the date notice that the claim was allowed was sent to the Contractor. In the event reimbursement from the Contractor is not received by the Contracting Agency within 30-days, interest shall accrue on the total reimbursement amount owing at the rate of 12-percent per annum calculated at a daily rate from the date the Contractor was notified that the claim was allowed. The Contracting Agency's costs to enforce recovery of these amounts are additive to the amounts owing.

1-07.15 Temporary Water Pollution/Erosion Control

In an effort to prevent, control, and stop water pollution and erosion within the project, thereby protecting the Work, nearby land, streams, and other bodies of water, the Contractor shall perform all Work in strict accordance with all Federal, State, and local laws and regulations governing waters of the State, as well as permits acquired for the project.

The Contractor shall perform all temporary water pollution/erosion control measures shown in the Plans, specified in the Special Provisions, proposed by the Contractor and approved by the Engineer, or ordered by the Engineer as Work proceeds.

Stormwater or dewatering water that has come in contact with concrete rubble, concrete pours, or cement treated soils shall be maintained to pH 8.5 or less before it is allowed to enter waters of the State. If pH exceeds 8.5, the Contractor shall immediately discontinue work and initiate treatment according to the plan to lower the pH. Work may resume, with treatment, once the pH of the stormwater is 8.5 or less or it can be demonstrated that the runoff will not reach surface waters.

High pH process water shall not be discharged to waters of the State. Unless specific measures are identified in the Special Provisions, high pH process water may be infiltrated, dispersed in vegetation or compost, or pumped to a sanitary sewer system. Water being infiltrated or dispersed shall have no chance of discharging directly to waters of the State, including wetlands or conveyances that indirectly lead to waters of the State. High pH process water shall be treated to within a range of 6.5 to 8.5 pH units prior to infiltration to ensure the discharge does not cause a violation of groundwater quality standards. If water is pumped to the sanitary sewer, the Contractor shall provide a copy of permits and requirements for placing the material into a sanitary sewer system prior to beginning the work. Process water may be collected and disposed of by the Contractor off the project site. The Contractor shall provide a copy of the permit for an approved waste site for the disposal of the process water prior to the start of work that generates the process water.

1-07.15(1) Spill Prevention, Control and Countermeasures Plan

The Contractor shall prepare a project-specific spill prevention, control, and countermeasures plan (SPCC Plan) that will be used for the duration of the project. The Contractor shall submit the plan to the Project Engineer no later than the date of the preconstruction conference. No on-site construction activities may commence until WSDOT accepts an SPCC Plan for the project.

The term “hazardous materials,” as used in this Specification, is defined in Chapter 447 of the WSDOT *Environmental Procedures Manual* (M 31-11). Occupational safety and health requirements that may pertain to SPCC Plan implementation are contained in, but not limited to, WAC 296-824 and WAC 296-843.

Implementation Requirements

The SPCC Plan shall be updated by the Contractor throughout project construction so that the written plan reflects actual site conditions and practices. The Contractor shall update the SPCC Plan at least annually and maintain a copy of the updated SPCC Plan on the project site. All project employees shall be trained in spill prevention and containment, and they shall know where the SPCC Plan and spill response kits are located and have immediate access to them.

If hazardous materials are encountered or spilled during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. The Contractor shall supply and maintain spill response kits of appropriate size within close proximity to hazardous materials and equipment.

The Contractor shall implement the spill prevention measures identified in the SPCC Plan before performing any of the following:

1. Placing materials or equipment in staging or storage areas.
2. Refueling, washing, or maintaining equipment.
3. Stockpiling contaminated materials.

SPCC Plan Element Requirements

The SPCC Plan shall set forth the following information in the following order:

1. Responsible Personnel
Identify the name(s), title(s), and contact information for the personnel responsible for implementing and updating the plan, including all spill responders.
2. Spill Reporting
List the names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a spill.
3. Project and Site Information
Describe the following items:
 - A. The project Work.
 - B. The site location and boundaries.
 - C. The drainage pathways from the site.
 - D. Nearby waterways and sensitive areas and their distances from the site.
4. Potential Spill Sources
Describe each of the following for all potentially hazardous materials brought or generated on-site (including materials used for equipment operation, refueling, maintenance, or cleaning):
 - A. Name of material and its intended use.
 - B. Estimated maximum amount on-site at any one time.

- C. Location(s) (including any equipment used below the ordinary high water line) where the material will be staged, used, and stored and the distance(s) from nearby waterways and sensitive areas.
- D. Decontamination location and procedure for equipment that comes into contact with the material.
- E. Disposal procedures.

5. Pre-Existing Contamination

Describe any pre-existing contamination and contaminant sources (such as buried pipes or tanks) in the project area that are described in the Contract documents. Identify equipment and work practices that will be used to prevent the release of contamination.

6. Spill Prevention and Response Training

Describe how and when all personnel (including refueling Contractors and Subcontractors) will be trained in spill prevention, containment, and response in accordance with the Plan. Describe how and when all spill responders will be trained in accordance with WAC 296-824.

7. Spill Prevention

Describe the following items:

- A. Spill response kit contents and location(s).
- B. Security measures for potential spill sources.
- C. Secondary containment practices and structures for all containers to handle the maximum volume of potential spill of hazardous materials.
- D. Methods used to prevent stormwater from contacting hazardous materials.
- E. Site inspection procedures and frequency.
- F. Equipment and structure maintenance practices.
- G. Daily inspection and cleanup procedures that ensure all equipment used below the ordinary high water line is free of all external petroleum-based products.
- H. Refueling procedures for equipment that cannot be moved from below the ordinary high water line.

8. Spill Response

Outline the response procedures the Contractor will follow for each scenario listed below. Include a description of the actions the Contractor shall take and the specific on-site spill response equipment that shall be used to assess the spill, secure the area, contain and eliminate the spill source, and clean up and dispose of spilled and contaminated material.

- A. A spill of each type of hazardous material at each location identified in 4, above.
- B. Stormwater that has come into contact with hazardous materials.
- C. A release or spill of any pre-existing contamination and contaminant source described in 5, above.
- D. A release or spill of any unknown pre-existing contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.
- E. A spill occurring during Work with equipment used below the ordinary high water line.

If the Contractor will use a Subcontractor for spill response, provide contact information for the Subcontractor under item 1 (above), identify when the Subcontractor will be used, and describe actions the Contractor shall take while waiting for the Subcontractor to respond.

9. Project Site Map

Provide a map showing the following items:

- A. Site location and boundaries.
- B. Site access roads.
- C. Drainage pathways from the site.
- D. Nearby waterways and sensitive areas.
- E. Hazardous materials, equipment, and decontamination areas identified in 4, above.
- F. Pre-existing contamination or contaminant sources described in 5, above.
- G. Spill prevention and response equipment described in 7 and 8, above.

10. Spill Report Forms

Provide a copy of the spill report form(s) that the Contractor will use in the event of a release or spill.

Payment

Payment will be made in accordance with Section 1-04.1 for the following Bid item when it is included in the Proposal:

“SPCC Plan,” lump sum.

When the written SPCC Plan is accepted by WSDOT, the Contractor shall receive 50-percent of the lump sum Contract price for the plan.

The remaining 50-percent of the lump sum price will be paid after the materials and equipment called for in the plan are mobilized to the project.

The lump sum payment for “SPCC Plan” shall be full pay for:

- 1. All costs associated with creating the accepted SPCC Plan.
- 2. All costs associated with providing and maintaining the on-site spill prevention equipment described in the accepted SPCC Plan.
- 3. All costs associated with providing and maintaining the on-site standby spill response equipment and materials described in the accepted SPCC Plan.
- 4. All costs associated with implementing the spill prevention measures identified in the accepted SPCC Plan.
- 5. All costs associated with updating the SPCC Plan as required by this Specification.

As to other costs associated with releases or spills, the Contractor may request payment as provided for in the Contract. No payment shall be made if the release or spill was caused by or resulted from the Contractor’s operations, negligence, or omissions.

1-07.16 Protection and Restoration of Property

1-07.16(1) Private/Public Property

The Contractor shall not use Contracting Agency owned or controlled property other than that directly affected by the Contract Work without the approval of the Engineer. If the Engineer grants such approval, the Contractor shall then vacate the area when ordered to do so by the Engineer. Approval to temporarily use the property shall not create any entitlement to further use or to compensation for any conditions or requirements imposed.

The Contractor shall protect private or public property on or in the vicinity of the Work site. The Contractor shall ensure that it is not removed, damaged, destroyed, or prevented from being used unless the Contract so specifies.

Property includes land, utilities, trees, landscaping, improvements legally on the right-of-way, markers, monuments, buildings, Structures, pipe, conduit, sewer or water lines, signs, and other property of all description whether shown on the Plans or not.

If the Engineer orders, or if otherwise necessary, the Contractor shall install protection, acceptable to the Engineer, for property such as that listed in the previous paragraph. The Contractor is responsible for locating and protecting all property that is subject to damage by the construction operation.

If the Contractor (or agents/employees of the Contractor) damage, destroy, or interfere with the use of such property, the Contractor shall restore it to original condition. The Contractor shall also halt any interference with the property's use. If the Contractor refuses or does not respond immediately, the Engineer may have such property restored by other means and subtract the cost from money that will be or is due the Contractor.

The Contractor may access the worksite from adjacent properties. The Contractor shall not use or allow others to use this access to merge with public traffic. During non-working hours, the Contractor shall provide a physical barrier that is either locked or physically unable to be moved without equipment. The access shall not go through any existing Structures. The access may go through fencing. The Contractor shall control or prevent animals from entering the worksite to the same degree that they were controlled before the fence was removed. The Contractor shall prevent persons not involved in the Contract Work from entering the worksite through the access or through trails and pathways intersected by the access. If the Contract documents require that existing trails or pathways be maintained during construction, the Contractor will insure the safe passage of trail or pathway users. The Contractor shall effectively control airborne particulates that are generated by use of the access. The location and use of the access shall not adversely affect wetlands or sensitive areas in any manner. The Contractor shall be responsible for obtaining all haul road agreements, permits and/or easements associated with the access. The Contractor shall replace any fence, repair any damage and restore the site to its original state when the access is no longer needed. The Contractor shall bear all costs associated with this worksite access.

1-07.16(2) Vegetation Protection and Restoration

Existing vegetation, where shown in the Plans or designated by the Engineer, shall be saved and protected through the life of the Contract. The Engineer will designate the vegetation to be saved and protected by a site preservation line, high visibility fencing, or individual flagging.

Damage which may require replacement of vegetation includes bark stripping, broken branches, exposed root systems, cut root systems, poisoned root systems, compaction of surface soil and roots, puncture wounds, drastic reduction of surface roots or leaf canopy, changes in grade greater than 6 inches, or any other changes to the location that may jeopardize the survival or health of the vegetation to be preserved.

When large roots of trees designated to be saved are exposed by the Contractor's operation, they shall be wrapped with heavy burlap for protection and to prevent excessive drying. The burlap shall be kept moist and securely fastened until the roots are covered to finish grade. All burlap and fastening material shall be removed from the roots before covering. All roots 1-inch or smaller in diameter, which are damaged, shall be pruned with a sharp saw or pruning shear. Damaged, torn, or ripped bark shall be removed as ordered by the Engineer at no additional cost to the Contracting Agency.

Any pruning activity required to complete the Work as specified shall be performed by persons qualified as a Certified Arborist at the direction of the Engineer.

If due to, or for any reason related to the Contractor's operation, any tree, shrub, ground cover or herbaceous vegetation designated to be saved is destroyed, disfigured, or damaged to the extent that continued life is questionable as determined by the Engineer, it shall be removed by the Contractor at the direction of the Engineer.

The Contractor will be assessed damages equal to triple the value of the vegetation as determined in the *Guide for Plant Appraisal*, Current Edition, published by the International Society of Arboriculture or the estimated cost of restoration with a similar species. Shrub, ground cover, and herbaceous plant values will be determined using the Cost of Cure Method. Any damage so assessed will be deducted from the monies due or that may become due the Contractor.

1-07.16(2)A Wetland and Sensitive Area Protection

Existing wetland and other environmentally sensitive areas, where shown in the Plans or designated by the Engineer, shall be saved and protected through the life of the Contract. When applicable, a site preservation line has been established as a boundary between work zones and sensitive environmental areas.

The Contractor shall install high visibility fence as shown in the Plans or designated by the Engineer in accordance with 8-01.3(1). The areas to be protected include critical environmental areas, buffer zones, and other areas of vegetation to be preserved. The Contractor shall keep areas identified by the site preservation lines free of construction equipment, construction materials, debris, and runoff. No access, including, but not limited to, excavation, clearing, staging, or stockpiling, shall be performed inside the protected area.

1-07.16(3) Fences, Mailboxes, Incidentals

The Contractor shall maintain any temporary fencing to prevent pedestrians from entering the worksite and to preserve livestock, crops, or property when working through or adjacent to private property. The Contractor is liable for all damages resulting from not complying with this requirement.

The usefulness of existing mail or paper boxes shall not be impaired. If the Contract anticipates removing and reinstalling the mail or paper boxes, the provisions of Section 8-18 will apply. If the mail or paper boxes are rendered useless solely by acts (or inaction) of the Contractor or for the convenience of the Contractor, the Work shall be performed as provided in Section 8-18 at the Contractor's expense.

1-07.16(4) Archaeological and Historical Objects

Archaeological or historical objects, such as ruins, sites, buildings, artifacts, fossils, or other objects of antiquity that may have significance from a historical or scientific standpoint, which may be encountered by the Contractor, shall not be further disturbed. The Contractor shall immediately notify the Engineer of any such finds.

The Engineer will determine if the material is to be salvaged. The Contractor may be required to stop Work in the vicinity of the discovery until such determination is made. The Engineer may require the Contractor to suspend Work in the vicinity of the discovery until salvage is accomplished.

If the Engineer finds that the suspension of Work in the vicinity of the discovery increases or decreases the cost or time required for performance of any part of the Work under this Contract, the Engineer will make an adjustment in payment or the time required for the performance of the Work in accordance with Sections 1-04.4 and 1-08.8.

1-07.16(4)A Inadvertent Discovery of Human Skeletal Remains

If human skeletal remains are encountered by the Contractor, they shall not be further disturbed. The Contractor shall immediately notify the Engineer of any such finds, and shall cease all work adjacent to the discovery, in an area adequate to provide

for the total security and protection of the integrity of the skeletal remains. The Engineer may require the Contractor to suspend Work in the vicinity of the discovery until final determinations are made and removal of the skeletal remains is completed.

If the Engineer finds that the suspension of Work in the vicinity of the discovery increases or decreases the cost or time required for performance of any part of the Work under this Contract, the Engineer will make an adjustment in payment or the time required for the performance of the Work in accordance with Sections 1-04.4 and 1-08.8.

1-07.16(5) Payment

All costs to comply with this section and for the protection and repair specified in this section, unless otherwise stated, are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the unit Bid prices of the Contract.

1-07.17 Utilities and Similar Facilities

The Contractor shall protect all private and public utilities from damage resulting from the Work. Among others, these utilities include: telephone, telegraph, and power lines; pipelines, sewer and water lines; railroad tracks and equipment; and Highway lighting and signing systems. All costs required to protect public and private utilities shall be at the Contractor's expense, except as provided otherwise in this section.

Chapter 19.122 of the Revised Code of Washington (RCW) relates to underground utilities. In accordance with this RCW, the Contractor shall call the One-Number Locator Service for field location of utilities. If no locator service is available for the area, notice shall be provided individually to those owners of utilities known to, or suspected of, having underground facilities within the area of the proposed excavation.

1-07.17(1) Utility Construction, Removal or Relocation by the Contractor

If the Work requires removing or relocating a utility, the Contract will assign the task to the Contractor or the utility owner. When the task is assigned to the Contractor it shall be performed in accordance with the Plans and Special Provisions. New utility construction shall be performed according to the appropriate Contract requirements.

To ease or streamline the Work for its own convenience, the Contractor may desire to ask utility owners to move, remove, or alter their equipment in ways other than those listed in the Plans or Special Provisions. The Contractor shall make the arrangements and pay all costs that arise from work performed by the utility owner at the Contractor's request. Two weeks prior to implementing any such utility work, the Contractor shall submit plans and details to the Project Engineer for approval describing the scope and schedule of all work performed at the Contractor's request by the utility owner.

In some cases, the Plans or Special Provisions may not show all underground facilities. If the Work requires these to be moved or protected, the Engineer will assign the task to others or issue a written change order requiring the Contractor to do so as provided in Section 1-04.4.

1-07.17(2) Utility Construction, Removal or Relocation by Others

Any authorized agent of the Contracting Agency or utility owners may enter the Highway right-of-way to repair, rearrange, alter, or connect their equipment. The Contractor shall cooperate with such effort and shall avoid creating delays or hindrances to those doing the work. As needed, the Contractor shall arrange to coordinate work schedules.

If the Contract provides notice that utility work (including furnishing, adjusting, relocating, replacing, or constructing utilities) will be performed by others during the prosecution of the Work, the Special Provisions will establish the utility owner's anticipated completion. The Contractor shall carry out the Work in a way that will

minimize interference and delay for all forces involved. Any costs incurred prior to the utility owners anticipated completion (or if no completion is specified, within a reasonable period of time) that results from the coordination and prosecution of the Work regarding utility adjustment, relocation, replacement, or construction shall be at the Contractor's expense as provided in Section 1-05.14.

When others delay the Work through late performance of utility work, the Contractor shall adhere to the requirements of Section 1-04.5. The Contracting Agency will either suspend Work according to Section 1-08.6, or order the Contractor to coordinate the Work with the work of the utility owner in accordance with Section 1-04.4. When ordered to coordinate the Work with the work of the utility owner, the Contractor shall prosecute the Work in a way that will minimize interference and delay for all forces involved.

1-07.18 Public Liability and Property Damage Insurance

The Contractor shall obtain and keep in force the following policies of insurance. The policies shall be with companies or through sources approved by the State Insurance Commissioner pursuant to Chapter 48.05, RCW. Unless otherwise indicated below, the policies shall be kept in force from the execution date of the Contract until the date of acceptance by the Secretary (Section 1-05.12).

1. Owners and Contractors Protective Insurance providing bodily injury and property damage liability coverage with limits of \$3,000,000 per occurrence and in the aggregate for each policy period, written on Insurance Services Office (ISO) form CG0009 together with Washington State Department of Transportation Amendatory Endorsement No. CG 29 08, specifying the State of Washington as a named insured.

The Contractor may choose to terminate this insurance after the date of Substantial Completion as determined by the Engineer or, should Substantial Completion not be achieved, after the date of Physical Completion as determined by the Engineer. In the event the Contractor elects to terminate this coverage, prior to acceptance of the Contract, the Contractor shall first obtain an endorsement to the Commercial General Liability Insurance described below that establishes the Contracting Agency on that policy as an additional insured.

2. Commercial General Liability Insurance written under ISO Form CG0001 or its equivalent with minimum limits of \$3,000,000 per occurrence and in the aggregate for each policy period. This protection may be a CGL policy or any combination of primary, umbrella or excess liability coverage affording total liability limits of not less than \$3,000,000. Products and completed operations coverage shall be provided for a period of one year following final acceptance of the Work.
3. Commercial Automobile Liability Insurance providing bodily injury and property damage liability coverage for all owned and nonowned vehicles assigned to or used in the performance of the Work with a combined single limit of not less than \$1,000,000 each occurrence with the State named as an additional insured in connection with the Contractor's Performance of the Contract.

The Owners and Contractors Protective Insurance policy shall not be subject to a deductible or contain provisions for a deductible. The Commercial General Liability policy and the Commercial Automobile Liability Insurance policy may, at the discretion of the Contractor, contain such provisions. If a deductible applies to any claim under these policies, then payment of that deductible will be the responsibility of the Contractor, notwithstanding any claim of liability against the Contracting Agency. However in no event shall any provision for a deductible provide for a deductible in excess of \$50,000.00.

Prior to Contract execution, the Contractor shall file with the Department of Transportation, Contract Payment Section, P.O. Box 47420, Olympia, WA 98504-7420, ACORD Form Certificates of Insurance evidencing the minimum insurance coverages required under these Specifications.

All insurance policies and Certificates of Insurance shall include a requirement providing for a minimum of 45-days prior written notice to the Contracting Agency of any cancellation or reduction of coverage. All insurance coverage required by this section shall be written and provided by “occurrence-based” policy forms rather than by “claims made” forms.

Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of Contract upon which the Contracting Agency may, after giving 5-working days notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

All costs for insurance, including any payments of deductible amounts, shall be considered incidental to and included in the unit Contract prices and no additional payment will be made.

1-07.19 Gratuities

The Contractor shall not extend any loan, gratuity, or gift of money in any form whatsoever to any employee or officer of the Contracting Agency; nor will the Contractor rent or purchase any equipment or materials from any employee or officer of the Contracting Agency. Before payment of the final estimate will be made, the Contractor shall execute and furnish the Contracting Agency an affidavit certifying compliance with these provisions of the Contract.

The Contractor shall comply with all applicable sections of the State Ethics law, RCW 42.52, which regulates gifts to State officers and employees. Under that statute, any Contracting Agency officer or employee who has or will participate with the Contractor regarding any aspect of this Contract is prohibited from seeking or accepting any gift, gratuity, favor or anything of economic value from the Contractor. Accordingly, neither the Contractor nor any agent or representative shall offer anything of economic value as a gift, gratuity, or favor directly or indirectly to any such officer or employee.

1-07.20 Patented Devices, Materials, and Processes

The Contractor shall assume all costs arising from the use of patented devices, materials, or processes used on or incorporated in the Work, and agrees to indemnify, defend, and save harmless the State, Governor, Commission, Secretary, and their duly authorized agents and employees from all actions of any nature for, or on account of the use of any patented devices, materials, or processes.

1-07.21 Rock Drilling Safety Requirements

It shall be the Contractor’s responsibility to maintain safe working conditions during rock drilling, by keeping dust concentration below the threshold limit value or by providing those protective devices that may be required by the State Department of Labor and Industries.

1-07.22 Use of Explosives

When using explosives, the Contractor shall use the utmost care to protect life and property, to prevent slides, and to leave undisturbed all materials, outside the neat lines of the cross-section.

Explosives shall be handled, marked, stored, and used in compliance with WAC 296-52 and such local laws, rules, and regulations that may apply. The stricter provisions shall apply.

All explosives shall be stored securely as required by all laws and ordinances that apply. Each storage place shall be clearly marked: "Dangerous-Explosives." No explosives shall be left unprotected.

If public utilities or railroads own equipment near the blast site, the Contractor shall notify the owners of the location, date, time, and approximate duration of the blasting. This notice shall be given sufficiently in advance to enable all owners to take any steps as they deem necessary to protect their property from injury.

Blasting near proposed Structures shall be completed before Work on them begins. When the use of explosives is necessary for the prosecution of the Work, the Contractor's insurance shall contain a special clause permitting the blasting.

1-07.23 Public Convenience and Safety

The Contractor shall be responsible for providing adequate safeguards, safety devices, protective equipment, and any other needed actions to protect the life, health, and safety of the public, and to protect property in connection with the performance of the Work covered by the Contract. The Contractor shall perform any measures or actions the Engineer may deem necessary to protect the public and property. The responsibility and expense to provide this protection shall be the Contractor's except that which is to be furnished by the Contracting Agency as specified in other sections of these Specifications. Nothing contained in this Contract is intended to create any third-party beneficiary rights in favor of the public or any individual utilizing the Highway facilities being constructed or improved under this Contract.

1-07.23(1) Construction Under Traffic

The Contractor shall conduct all operations with the least possible obstruction and inconvenience to the public. The Contractor shall have under construction no greater length or amount of Work than can be prosecuted properly with due regards to the rights of the public. To the extent possible, the Contractor shall finish each section before beginning Work on the next. The Contractor shall enter interstate Highways only through legal movements from existing roads, streets, and through other access points specifically allowed by the Contract documents.

To disrupt public traffic as little as possible, the Contractor shall permit traffic to pass through the Work with the least possible inconvenience or delay. The Contractor shall maintain existing roads, streets, sidewalks, and paths within the project limits, keeping them open and in good, clean, safe condition at all times. Deficiencies caused by the Contractor's operations shall be repaired at the Contractor's expense. The Contractor shall also maintain roads, streets, sidewalks, and paths adjacent to the project limits when affected by the Contractor's operations. Snow and ice control will be performed by the Contracting Agency on all projects. Cleanup of snow and ice control debris will be at the Contracting Agency's expense. The Contractor shall perform the following:

1. Remove or repair any condition resulting from the Work that might impede traffic or create a hazard.
2. Keep existing traffic signal and Highway lighting systems in operation as the Work proceeds. (The Contracting Agency will continue the routine maintenance on such system.)
3. Maintain the striping on the Roadway at the Contracting Agency's expense. The Contractor shall be responsible for scheduling when to renew striping, subject to the approval of the Engineer. When the scope of the project does not require Work on the Roadway, the Contracting Agency will be responsible for maintaining the striping.

4. Maintain existing permanent signing. Repair of signs will be at the Contracting Agency's expense, except those damaged due to the Contractor's operations.
5. Keep drainage Structures clean to allow for free flow of water. Cleaning of existing drainage Structures will be at the Contracting Agency's expense when approved by the Engineer, except when flow is impaired due to the Contractor's operations.

To protect the rights of abutting property owners, the Contractor shall:

1. Conduct the construction so that the least inconvenience as possible is caused to abutting property owners;
2. Maintain ready access to driveways, houses, and buildings along the line of Work;
3. Provide temporary approaches to crossing or intersecting roads and keep these approaches in good condition; and
4. Provide another access before closing an existing one whenever the Contract calls for removing and replacing an abutting owner's access.

When traffic must pass through grading areas, the Contractor shall:

1. Make cuts and fills that provide a reasonably smooth, even Roadbed;
2. Place, in advance of other grading Work, enough fill at all culverts and bridges to permit traffic to cross;
3. Make Roadway cuts and fills, if ordered by the Engineer, in partial-width lifts, alternating lifts from side to side to permit traffic to pass on the side opposite the Work;
4. Install culverts on half the width of the Traveled Way, keeping the other half open to traffic and unobstructed until the first half is ready for use;
5. After rough grading or placing any subsequent layers, prepare the final Roadbed to a smooth, even surface (free of humps and dips) suitable for use by public traffic; and
6. Settle dust with water, or other dust palliative, as the Engineer may order.

If grading Work is on or next to a Roadway in use, the Contractor shall finish the grade immediately after rough grading and place surfacing materials as the Work proceeds.

The Contractor shall conduct all operations to minimize any drop-offs (abrupt changes in roadway elevation) left exposed to traffic during nonworking hours. Unless otherwise specified in the Traffic Control Plan, drop-offs left exposed to traffic during nonworking hours shall be protected as follows:

1. Drop-offs up to 0.20 foot, unless otherwise ordered by the Engineer, may remain exposed with appropriate warning signs alerting motorists of the condition.
2. Drop-offs more than 0.20-foot that are in the Traveled Way or Auxiliary Lane will not be allowed unless protected with appropriate warning signs and further protected as indicated in 3b or 3c below.
3. Drop-offs more than 0.20 foot, but no more than 0.50 foot, that are not within the Traveled Way shall be protected with appropriate warning signs and further protected by having one of the following:
 - a. A wedge of compacted stable material placed at a slope of 4:1 or flatter.
 - b. Channelizing devices (Type I barricades, plastic safety drums, or other devices 36 inches or more in height) placed along the traffic side of the drop-off and a new edge of pavement stripes placed a minimum of 3 feet from the drop-off. The maximum spacing between the devices in feet shall

- be the posted speed in miles per hour. Pavement drop-off warning signs shall be placed in advance and throughout the drop-off treatment.
- c. Temporary concrete barrier or other approved barrier installed on the traffic side of the drop-off with 2-feet between the drop-off and the back of the barrier and a new edge of pavement stripe a minimum of 2-feet from the face of the barrier. An approved terminal, flare, or impact attenuator will be required at the beginning of the section. For night use, the barrier shall have standard delineation such as paint, reflective tape, lane markers, or warning lights.
 4. Drop-offs more than 0.50-foot not within the Traveled Way or Auxiliary Lane shall be protected with appropriate warning signs and further protected as indicated in 3a, 3b, or 3c if all of the following conditions are met:
 - a. The drop-off is less than 2-feet;
 - b. The total length throughout the project is less than 1 mile;
 - c. The drop-off does not remain for more than 3-working days;
 - d. The drop-off is not present on any of the holidays listed in Section 1-08.5; and
 - e. The drop-off is only on one side of the Roadway.
 5. Drop-offs more than 0.50 foot that are not within the Traveled Way or Auxiliary Lane and are not otherwise covered by No. 4 above shall be protected with appropriate warning signs and further protected as indicated in 3a or 3c.
 6. Open trenches within the Traveled Way or Auxiliary Lane shall have a steel-plate cover placed and anchored over them. A wedge of suitable material, if required, shall be placed for a smooth transition between the pavement and the steel plate. Warning signs shall be used to alert motorists of the presence of the steel plates.

1-07.23(2) Construction and Maintenance of Detours

Unless otherwise approved, the Contractor shall maintain two-way traffic during construction. The Contractor shall build, maintain in a safe condition, keep open to traffic, and remove when no longer needed:

1. Detours and detour bridges that will accommodate traffic diverted from the Roadway, bridge, sidewalk, or path during construction,
2. Detour crossings of intersecting Highways, and
3. Temporary approaches.

Unit Contract prices will cover construction, maintenance, and removal of all detours shown in the Plans or proposed by the Contracting Agency.

The Contractor shall pay all costs to build, maintain, and remove any other detours, whether built for the Contractor's convenience or to facilitate construction operations. Any detour proposed by the Contractor shall not be built until the Engineer approves. Surfacing and paving shall be consistent with traffic requirements.

Upon failure of the Contractor to immediately provide, maintain, or remove detours or detour bridges when ordered to do so by the Engineer, the Contracting Agency may, without further notice to the Contractor or the Surety, provide, maintain, or remove the detours or detour bridges and deduct the costs from any payments due or coming due to the Contractor.

1-07.24 Rights of Way

All rights of way for the completed facility will be provided by the Contracting Agency in advance of construction. Any exceptions will be noted in the Special Provisions. Should the necessary Right of Way not be available as provided in the Contract, an extension of time will be considered in accordance with Section 1-08.8.

1-07.25 Opening of Sections to Traffic

The Contracting Agency reserves the right to use and open to traffic any portion of the Work before the Physical Completion Date of the entire Contract without constituting acceptance of any of the Work. This action will not cause the Contracting Agency to incur any liability to the Contractor except as may otherwise be provided in the Contract.

If the Contracting Agency opens any portion of the Work prior to the Physical Completion Date of the entire Contract because early opening is specified in the Contract or when the Contractor has failed to prosecute the Work continuously and efficiently, any Work remaining shall be performed by the Contractor at the unit Contract prices for the items of Work involved. No additional payment will be made for costs incurred by the Contractor because of: (1) inconvenience, additional length of travel to conform to established traffic patterns and planned access features; (2) compliance with statutes governing traffic regulations and limitations of loads; or (3) additional flagging costs necessary to protect the operations and the traveling public. The Contractor shall take all costs due to traffic using portions of the Work into account when submitting the Bid Proposal, and the unit Contract prices for the various items of Work involved shall include these costs.

1-07.26 Personal Liability of Public Officers

Neither the Governor, the Commission, the Secretary, the Engineer, nor any other officer or employee of the State shall be personally liable for any acts or failure to act in connection with the Contract, it being understood that in such matters, they are acting solely as agents of the State.

1-07.27 No Waiver of State's Legal Rights

The State shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefore from showing the true amount and character of the Work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate, or certificate is untrue or incorrectly made, or that the Work or materials do not conform in fact to the Contract. The State shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate, and payment in accordance therewith, from recovering from the Contractor and the Sureties such damages as it may sustain by reason of the Contractor's failure to comply with the terms of the Contract. Neither the acceptance by the Secretary, nor any payment for the whole or any part of the Work, nor any extension of time, nor any possession taken by the State shall operate as a waiver of any portion of the Contract or of any power herein reserved or any right to damages herein provided, or bar recovery of any money wrongfully or erroneously paid to the Contractor. A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor and the State recognize that the impact of overcharges to the State by the Contractor resulting from antitrust law violations by the Contractor's suppliers or Subcontractors adversely affects the State rather than the Contractor. Therefore, the Contractor agrees to assign to the State any and all claims for such overcharges.

1-08 PROSECUTION AND PROGRESS

1-08.1 Subcontracting

Work done by the Contractor's own organization shall account for at least 30-percent of the Awarded Contract price. Before computing this percentage, however, the Contractor may subtract (from the Awarded Contract price) the costs of any subcontracted Work on items the Contract designates as specialty items.

The Contractor shall not subcontract Work unless the Engineer approves in writing. Each request to subcontract shall be on the form the Engineer provides. If the Engineer requests, the Contractor shall provide proof that the Subcontractor has the experience, ability, and equipment the Work requires. The Contractor shall require each Subcontractor to comply with Section 1-07.9 and to furnish all certificates and statements required by the Contract.

Prior to subcontracting any Work, the Contractor shall verify that every first tier Subcontractor meets the responsibility criteria stated below at the time of subcontract execution. The Contractor shall include these responsibility criteria in every subcontract, and require every Subcontractor to:

1. Possess any electrical contractor license required by 19.28 RCW or elevator contractor license required by 70.87 RCW, if applicable;
2. Have a certificate of registration in compliance with chapter 18.27 RCW;
3. Have a current State unified business identifier number;
4. If applicable, have
 - a. Industrial insurance coverage for the bidder's employees working in Washington (Title 51 RCW);
 - b. An employment security department number (Title 50 RCW);
 - c. A State excise tax registration number (Title 82 RCW);
5. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or RCW 39.12.065(3).
6. Verify these responsibility criteria for every lower tier subcontractor at the time of subcontract execution; and,
7. Include these responsibility criteria in every lower tier subcontract.

Along with the request to sublet, the Contractor shall submit the names of any contracting firms the Subcontractor proposes to use as lower tier subcontractors. Collectively, these lower tier subcontractors shall not do Work that exceeds 25-percent of the total amount subcontracted to a Subcontractor. When a Subcontractor is responsible for construction of a specific Structure or Structures, the following Work may be performed by lower tier Subcontractors without being subject to the 25-percent limitation:

1. Furnishing and driving of piling, or
2. Furnishing and installing concrete reinforcing and post-tensioning steel.

Except for the 25-percent limit, lower tier subcontractors shall meet the same requirements as Subcontractors.

The Engineer will approve the request only if satisfied with the proposed Subcontractor's record, equipment, experience, and ability. Approval to subcontract shall not:

1. Relieve the Contractor of any responsibility to carry out the Contract,
2. Relieve the Contractor of any obligations or liability under the Contract and the Contractor's bond,
3. Create any contract between the Contracting Agency and the Subcontractor, or
4. Convey to the Subcontractor any rights against the Contracting Agency.

The Contracting Agency will not consider as subcontracting: (1) purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any other materials supplied by established and recognized commercial plants; or (2) delivery of these materials to the Work site in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies hired by those commercial plants. However, the Washington State Department of Labor and Industries may determine that RCW 39.12 applies to the employees of such firms identified in 1 and 2 above in accordance with WAC 296-127. If this should occur, the provisions of Section 1-07.9, as modified or supplemented, shall apply.

On all projects funded with Contracting Agency funds only, the Contractor shall certify to the actual amounts paid Disadvantaged, Minority, or Women's Business Enterprise firms that were used as Subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the Contract. This Certification shall be submitted to the Project Engineer on WSDOT form 421-023, "Annual Report of Amounts Paid as MBE/WBE Participants", annually for the State fiscal year July 1 through June 30, or through Physical Completion of the Contract, whichever occurs earliest. The report is due July 20th following the fiscal year end or 20-calendar days after Physical Completion of the Contract.

On all projects funded with both Contracting Agency funds and Federal assistance the Contractor shall submit a "Quarterly Report of Amounts Credited as DBE Participation" on a quarterly basis for every quarter in which the Contract is active (Work is accomplished) or upon completion of the project, as appropriate. The quarterly reports are due on the 20th of April, July, October, and January for the four respective quarters. When required, this "Quarterly Report of Amounts Credited as DBE Participation" is in lieu of WSDOT form 421-023, "Annual Report of Amounts Paid as MBE/WBE Participants".

If dissatisfied with any part of the subcontracted Work, the Engineer may request in writing that the Subcontractor be removed. The Contractor shall comply with this request at once and shall not employ the Subcontractor for any further Work under the Contract.

1-08.1(1) Subcontract Completion and Return of Retainage Withheld

The following procedure shall apply to all subcontracts entered into as a part of this Contract:

Requirements

1. The Subcontractor shall make a written request to the Contractor for the release of the Subcontractor's retainage or retainage bond.
2. Within 10-working days of the request, the Contractor shall determine if the subcontract has been satisfactorily completed and shall inform the Subcontractor, in writing, of the Contractor's determination.
3. If the Contractor determines that the subcontract has been satisfactorily completed, the Subcontractor's retainage or retainage bond shall be released by the Contractor within 10-working days from the date of the written notice.
4. If the Contractor determines that the Subcontractor has not achieved satisfactory completion of the subcontract, the Contractor must provide the Subcontractor with written notice, stating specifically why the subcontract Work is not satisfactorily completed and what has to be done to achieve completion. The Contractor shall release the Subcontractor's retainage or retainage bond within 8-working days after the Subcontractor has satisfactorily completed the Work identified in the notice.

5. In determining whether satisfactory completion has been achieved, the Contractor may require the Subcontractor to provide documentation such as certifications and releases, showing that all laborers, lower-tiered subcontractors, suppliers of material and equipment, and others involved in the Subcontractor's Work have been paid in full. The Contractor may also require any documentation from the Subcontractor that is required by the subcontract or by the Contract between the Contractor and Contracting Agency or by law such as affidavits of wages paid, material acceptance certifications and releases from applicable governmental agencies to the extent that they relate to the Subcontractor's Work.
6. If the Contractor fails to comply with the requirements of the Specification and the Subcontractor's retainage or retainage bond is wrongfully withheld, the Subcontractor may seek recovery against the Contractor under applicable prompt pay statutes in addition to any other remedies provided for by the subcontract or by law.

Conditions

1. This clause does not create a contractual relationship between the Contracting Agency and any Subcontractor as stated in Section 1-08.1. Also, it is not intended to bestow upon any Subcontractor, the status of a third-party beneficiary to the Contract between the Contracting Agency and the Contractor.
2. This section of the Contract does not apply to retainage withheld by the Contracting Agency from monies earned by the Contractor. The Contracting Agency shall continue to process the release of that retainage based upon the Completion Date of the project as defined in Section 1-08.5 Time for Completion and in accordance with the requirements and procedures set forth in chapter 60.28 RCW.

Payment

The Contractor will be solely responsible for any additional costs involved in paying retainage to the Subcontractors prior to total project completion. Those costs shall be incidental to the respective Bid items

1-08.2 Assignment

The Contractor shall not assign all or any part of the Work unless the Engineer approves in writing. The Engineer will not approve any proposed assignment that would relieve the original Contractor or Surety of responsibility under the Contract.

Money due (or that will become due) to the Contractor may be assigned. If given written notice, the Contracting Agency will honor such an assignment to the extent the law permits. But the assignment shall be subject to all setoffs, withholdings, and deductions required by law and the Contract.

1-08.3 Progress Schedule

1-08.3(1) General Requirements

The Contractor shall submit Type A or Type B Progress Schedules and Schedule Updates to the Engineer for approval. Schedules shall show Work that complies with all time and order of Work requirements in the Contract. Scheduling terms and practices shall conform to the standards established in *Construction Planning and Scheduling, Second Edition*, published by the Associated General Contractors of America. Except for Weekly Look-Ahead Schedules, all schedules shall meet these General Requirements, and provide the following information:

1. Include all activities necessary to physically complete the project.
2. Show the planned order of Work activities in a logical sequence.

3. Show durations of Work activities in working days as defined in Section 1-08.5.
4. Show activities in durations that are reasonable for the intended Work.
5. Define activity durations in sufficient detail to evaluate the progress of individual activities on a daily basis.
6. Show the Physical Completion of all Work within the authorized Contract time.

The Contracting Agency allocates its resources to a Contract based on the total time allowed in the Contract. The Contracting Agency may accept a Progress Schedule indicating an early Physical Completion Date but cannot guarantee the Contracting Agency's resources will be available to meet an accelerated schedule. No additional compensation will be allowed if the Contractor is not able to meet their accelerated schedule due to the unavailability of Contracting Agency's resources or for other reasons beyond the Contracting Agency's control.

If the Engineer determines that the Progress Schedule or any necessary Schedule Update does not provide the required information, then the schedule will be returned to the Contractor for correction and resubmittal.

The Engineer's approval of any schedule shall not transfer any of the Contractor's responsibilities to the Contracting Agency. The Contractor alone shall remain responsible for adjusting forces, equipment, and Work schedules to ensure completion of the Work within the time(s) specified in the Contract.

1-08.3(2) Progress Schedule Types

Type A Progress Schedules are required on all projects that do not contain the Bid item for Type B Progress Schedule. Type B Progress Schedules are required on all projects that contain the Bid item for Type B Progress Schedule. Weekly Look-Ahead Schedules and Schedule Updates are required on all projects.

1-08.3(2)A Type A Progress Schedule

The Contractor shall submit five copies of a Type A Progress Schedule no later than 10-days after the date the contract is executed, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format is used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15-calendar days of receiving the submittal.

1-08.3(2)B Type B Progress Schedule

The Contractor shall submit a preliminary Type B Progress Schedule no later than five calendar days after the date the Contract is executed. The preliminary Type B Progress Schedule shall comply with all of these requirements and the requirements of Section 1-08.3(1), except that it may be limited to only those activities occurring within the first 60-working days of the project.

The Contractor shall submit five copies of a Type B Progress Schedule depicting the entire project no later than 30-calendar days after the date the Contract is executed. The schedule shall be a critical path method (CPM) schedule developed by the Precedence Diagramming Method (PDM). Restraints may be utilized, but may not serve to change the logic of the network or the critical path. The schedule shall display at least the following information:

- Contract Number and Title
- Construction Start Date
- Critical Path
- Activity Description
- Milestone Description

Activity Duration
Predecessor Activities
Successor Activities
Early Start (ES) and Early Finish (EF) for each activity
Late Start (LS) and Late Finish (LF) for each activity
Total Float (TF) and Free Float (FF) for each activity
Physical Completion Date
Data Date

The Engineer will evaluate the Type B Progress Schedule and approve or return the schedule for corrections within 15-calendar days of receiving the submittal.

1-08.3(2)C Vacant

1-08.3(2)D Weekly Look-Ahead Schedule

Each week that Work will be performed, the Contractor shall submit a Weekly Look-Ahead Schedule showing the Contractor's and all Subcontractors' proposed Work activities for the next two weeks. The Weekly Look-Ahead Schedule shall include the description, duration and sequence of Work, along with the planned hours of Work. This schedule may be a network schedule, bar chart, or other standard schedule format. The Weekly Look-Ahead Schedule shall be submitted to the Engineer by the midpoint of the week preceding the scheduled Work or some other mutually agreed upon submittal time.

1-08.3(3) Schedule Updates

The Engineer may request a Schedule Update when any of the following events occur:

1. The project has experienced a change that affects the critical path.
2. The sequence of Work is changed from that in the approved schedule.
3. The project is significantly delayed.
4. Upon receiving an extension of Contract time.

The Contractor shall submit five copies of a Type A or Type B Schedule Update within 15 calendar days of receiving a written request, or when an update is required by any other provision of the Contract. A "significant" delay in time is defined as 10-working days or 10-percent of the original Contract time, whichever is greater.

In addition to the other requirements of this Section, Schedule Updates shall reflect the following information:

1. The actual duration and sequence of as-constructed Work activities, including changed Work.
2. Approved time extensions.
3. Any construction delays or other conditions that affect the progress of the Work.
4. Any modifications to the as-planned sequence or duration of remaining activities.
5. The Physical Completion of all remaining Work in the remaining Contract time.

Unresolved requests for time extensions shall be reflected in the Schedule Update by assuming no time extension will be granted, and by showing the effects to follow-on activities necessary to physically complete the project within the currently authorized time for completion.

1-08.3(4) Measurement

No specific unit of measurement shall apply to the lump sum item for Type B Progress Schedule.

1-08.3(5) Payment

Payment will be made in accordance with Section 1-04.1, for the following Bid item when it is included in the Proposal:

“Type B Progress Schedule”, lump sum.

The lump sum price shall be full pay for all costs for furnishing the Type B Progress Schedule and preliminary Type B Progress Schedule.

Payment of 80-percent of the lump sum price will be made upon approval of the Progress Schedule.

Payment will be increased to 100-percent of the lump sum price upon completion of 80-percent of the original total Contract Award amount.

All costs for providing Type A Progress Schedules and Weekly Look-Ahead Schedules are considered incidental to other items of Work in the Contract.

No payment will be made for Schedule Updates that are required due to the Contractors operations. Schedule Updates required by events that are attributed to the actions of the Contracting Agency will be paid for in accordance with Section 1-09.4.

1-08.4 Prosecution of Work

The Contractor shall begin Work within 21-calendar days from the date of execution of the Contract by the Contracting Agency, unless otherwise approved in writing. The Contractor shall diligently pursue the Work to the Physical Completion Date within the time specified in the Contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the Work within the time(s) specified in the Contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

1-08.5 Time for Completion

The Contractor shall complete all physical Contract Work within the number of “working days” stated in the Contract Provisions or as extended by the Engineer in accordance with Section 1-08.8. Every day will be counted as a “working day” unless it is a nonworking day or an Engineer determined unworkable day. A nonworking day is defined as a Saturday, a Sunday, a whole or half day on which the Contract specifically prohibits Work on the critical path of the Contractor’s approved progress schedule, or one of these holidays: January 1, the third Monday of January, the third Monday of February, Memorial Day, July 4, Labor Day, November 11, Thanksgiving Day, the day after Thanksgiving, and Christmas Day. When the holiday falls on a Saturday, the preceding Friday shall be counted a nonworking day. The days between December 25 and January 1 will be classified as nonworking days.

An unworkable day is defined as a half or whole day the Engineer declares to be unworkable because of weather or conditions caused by the weather that prevents satisfactory and timely performance of the Work shown on the critical path of the Contractor’s approved progress schedule. Other conditions beyond the control of the Contractor may qualify for an extension of time in accordance with Section 1-08.8.

Contract time shall begin on the first working day following the 21st calendar day after the date the Contracting Agency executes the Contract. If the Contractor starts Work

on the project at an earlier date, then Contract time shall begin on the first working day when onsite Work begins. The Contract Provisions may specify another starting date for Contract time, in which case, time will begin on the starting date specified.

Each working day shall be charged to the Contract as it occurs, until the Contract Work is physically complete. If Substantial Completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the Contract the week before; (2) specified for the Physical Completion of the Contract; and (3) remaining for the Physical Completion of the Contract. The statement will also show the nonworking days and any half or whole day the Engineer declares as unworkable. Within 10-calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct.

The Engineer will give the Contractor written notice of the Physical Completion Date for all Work the Contract requires. That date shall constitute the Physical Completion Date of the Contract, but shall not imply the Secretary's acceptance of the Work or the Contract.

The Engineer will give the Contractor written notice of the Completion Date of the Contract after all the Contractor's obligations under the Contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical Work on the project must be complete; and
2. The Contractor must furnish all documentation required by the Contract and required by law, to allow the Contracting Agency to process final acceptance of the Contract. The following documents must be received by the Project Engineer prior to establishing a Completion Date:
 - a. Certified Payrolls (Federal-aid Projects)
 - b. Material Acceptance Certification Documents
 - c. Annual Report of Amounts Paid as MBE/WBE Participants or Quarterly Report of Amounts Credited as DBE Participation, as required by the Contract Provisions.
 - d. Final Contract Voucher Certification

1-08.6 Suspension of Work

The Engineer may order suspension of all or any part of the Work if:

1. Unsuitable weather prevents satisfactory and timely performance of the Work; or
2. The Contractor does not comply with the Contract; or
3. It is in the public interest.

When ordered by the Engineer to suspend or resume Work, the Contractor shall do so immediately.

If the Work is suspended for reason (1) above, the period of Work stoppage will be counted as unworkable days. But if the Engineer believes the Contractor should have completed the suspended Work before the suspension, all or part of the suspension period may be counted as working days. The Engineer will set the number of unworkable days (or parts of days) by deciding how long the suspension delayed the entire project.

If the Work is suspended for reason (2) above, the period of Work stoppage will be counted as working days. The lost Work time, however, shall not relieve the Contractor from any Contract responsibility.

If the performance of all or any part of the Work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the Contracting Agency in the administration of the Contract, or by failure to act within the time specified in the Contract (or if no time is specified, within a reasonable time), the Engineer will make an adjustment for any increase in the cost or time for the performance of the Contract (excluding profit) necessarily caused by the suspension, delay, or interruption. However, no adjustment will be made for any suspension, delay, or interruption if (1) the performance would have been suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or (2) an equitable adjustment is provided for or excluded under any other provision of the Contract.

If the Contractor believes that the performance of the Work is suspended, delayed, or interrupted for an unreasonable period of time and such suspension, delay, or interruption is the responsibility of the Contracting Agency, the Contractor shall immediately submit a written notice of protest to the Engineer as provided in Section 1-04.5. No adjustment shall be allowed for any costs incurred more than 10-calendar days before the date the Engineer receives the Contractor's written notice of protest. If the Contractor contends damages have been suffered as a result of such suspension, delay, or interruption, the protest shall not be allowed unless the protest (stating the amount of damages) is asserted in writing as soon as practicable, but no later than the date of the Contractor's signature on the Final Contract Voucher Certification. The Contractor shall keep full and complete records of the costs and additional time of such suspension, delay, or interruption and shall permit the Engineer to have access to those records and any other records as may be deemed necessary by the Engineer to assist in evaluating the protest.

The Engineer will determine if an equitable adjustment in cost or time is due as provided in this section. The equitable adjustment for increase in costs, if due, shall be subject to the limitations provided in Section 1-09.4, provided that no profit of any kind will be allowed on any increase in cost necessarily caused by the suspension, delay, or interruption.

Request for extensions of time will be evaluated in accordance with Section 1-08.8.

The Engineer's determination as to whether an adjustment should be made will be final as provided in Section 1-05.1.

No claim by the Contractor under this clause shall be allowed unless the Contractor has followed the procedures provided in this Section and in Sections 1-04.5 and 1-09.11.

1-08.7 Maintenance During Suspension

Before and during any suspension (as described in Section 1-08.6) the Contractor shall protect the Work from damage or deterioration. Suspension shall not relieve the Contractor from anything the Contract requires unless this section states otherwise.

At no expense to the Contracting Agency, the Contractor shall provide through the construction area a safe, smooth, and unobstructed Roadway for public use during suspension (as required in Section 1-07.23 or the Special Provisions). This may include a temporary road or detour.

If the Engineer determines that the Contractor failed to pursue the Work diligently before the suspension, or failed to comply with the Contract or orders, then the Contractor shall maintain the temporary Roadway in use during suspension. In this case, the Contractor shall bear the maintenance costs. If the Contractor fails to maintain the temporary Roadway, the Contracting Agency will do the Work and deduct all resulting costs from payments due to the Contractor.

If the Engineer determines that the Contractor has pursued the Work diligently before the suspension, then the Contracting Agency will maintain the temporary Roadway (and bear its cost). This Contracting Agency-provided maintenance work will include only routine maintenance of:

1. The Traveled Way, Auxiliary Lanes, Shoulders, and detour surface,
2. Roadway drainage along and under the traveled Roadway or detour, and
3. All barricades, signs, and lights needed for directing traffic through the temporary Roadway or detour in the construction area.

The Contractor shall protect and maintain all other Work in areas not used by traffic. All costs associated with protecting and maintaining such Work shall be the responsibility of the Contractor except those costs associated with implementing the TESC Plan according to Section 8-01.

After any suspension during which the Contracting Agency has done the routine maintenance, the Contractor shall accept the traveled Roadway or detour as is when Work resumes. The Contractor shall make no claim against the Contracting Agency for the condition of the Roadway or detour.

After any suspension, the Contractor shall resume all responsibilities the Contract assigns for the Work.

1-08.8 Extensions of Time

The Contractor shall submit any requests for time extensions to the Engineer in writing no later than 10-working days after the delay occurs. The requests for time extension shall be limited to the affect on the critical path of the Contractor's approved schedule attributable to the change or event giving rise to the request.

To be considered by the Engineer, the request shall be in sufficient detail (as determined by the Engineer) to enable the Engineer to ascertain the basis and amount of the time requested. The request shall include an updated schedule that supports the request and demonstrates that the change or event: (1) had a specific impact on the critical path, and except in cases of concurrent delay, was the sole cause of such impact, and (2) could not have been avoided by resequencing of the Work or by using other reasonable alternatives. If a request combined with previous extension requests, equals 20-percent or more of the original Contract time then the Contractor's letter of request must bear consent of Surety. In evaluating any request, the Engineer will consider how well the Contractor used the time from Contract execution up to the point of the delay and the effect the delay has on any completion times included in the Special Provisions. The Engineer will evaluate and respond within 15-calendar days of receiving the request.

The authorized time for Physical Completion will be extended for a period equal to the time the Engineer determines the Work was delayed because of:

1. Adverse weather causing the time requested to be unworkable, provided that the Engineer had not already declared the time to be unworkable and the Contractor has filed a written protest according to Section 1-08.5.
2. Any action, neglect, or default of the Contracting Agency, its officers, or employees, or of any other contractor employed by the Contracting Agency.
3. Fire or other casualty for which the Contractor is not responsible.
4. Strikes.
5. Any other conditions for which these Specifications permit time extensions such as:
 - a. In Section 1-04.4 if a change increases the time to do any of the Work including unchanged Work.
 - b. In Section 1-04.5 if increased time is part of a protest that is found to be a valid protest.

- c. In Section 1-04.7 if a changed condition is determined to exist that caused a delay in completing the Contract.
- d. In Section 1-05.3 if the Contracting Agency does not approve properly prepared and acceptable drawings within 30-calendar days.
- e. In Section 1-07.13 if the performance of the Work is delayed as a result of damage by others.
- f. In Section 1-07.17 if the removal or the relocation of any utility by forces other than the Contractor caused a delay.
- g. In Section 1-07.24 if a delay results from all the Right of Way necessary for the construction not being purchased and the Special Provisions does not make specific provisions regarding unpurchased Right of Way.
- h. In Section 1-08.6 if the performance of the Work is suspended, delayed, or interrupted for an unreasonable period of time that proves to be the responsibility of the Contracting Agency.
- i. In Section 1-09.11 if a dispute or claim also involves a delay in completing the Contract and the dispute or claim proves to be valid.
- j. In Section 1-09.6 for Work performed on a force account basis.
6. If the actual quantity of Work performed for a Bid item was more than the original Plan quantity and increased the duration of a critical activity. Extensions of time will be limited to only that quantity exceeding the original Plan quantity.
7. Exceptional causes not specifically identified in items 1 through 6, provided the request letter proves the Contractor had no control over the cause of the delay and could have done nothing to avoid or shorten it.

Working days added to the Contract by time extensions, when time has overran, shall only apply to days on which liquidated damages or direct engineering have been charged, such as the following:

If Substantial Completion has been granted prior to all of the authorized working days being used, then the number of days in the time extension will eliminate an equal number of days on which direct engineering charges have accrued. If the Substantial Completion Date is established after all of the authorized working days have been used, then the number of days in the time extension will eliminate an equal number of days on which liquidated damages or direct engineering charges have accrued.

The Engineer will not allow a time extension for any cause listed above if it resulted from the Contractor's default, collusion, action or inaction, or failure to comply with the Contract.

The Contracting Agency considers the time specified in the Special Provisions as sufficient to do all the Work. For this reason, the Contracting Agency will not grant a time extension for:

1. Failure to obtain all materials and workers unless the failure was the result of exceptional causes as provided above in subsection 7;
2. Changes, protests, increased quantities, or changed conditions (Section 1-04) that do not delay the completion of the Contract or prove to be an invalid or inappropriate time extension request;
3. Delays caused by nonapproval of drawings or plans as provided in Section 1-05.3;
4. Rejection of faulty or inappropriate equipment as provided in Section 1-05.9;
5. Correction of thickness deficiency as provided in Section 5-05.5(1)B.

The Engineer will determine whether the time extension should be granted, the reasons for the extension, and the duration of the extension, if any. Such determination will be final as provided in Section 1-05.1.

1-08.9 Liquidated Damages

Time is of the essence of the Contract. Delays inconvenience the traveling public, obstruct traffic, interfere with and delay commerce, and increase risk to Highway users. Delays also cost tax payers undue sums of money, adding time needed for administration, engineering, inspection, and supervision.

Because the Contracting Agency finds it impractical to calculate the actual cost of delays, it has adopted the following formula to calculate liquidated damages for failure to complete the physical Work of a Contract on time.

Accordingly, the Contractor agrees:

1. To pay (according to the following formula) liquidated damages for each working day beyond the number of working days established for Physical Completion, and
2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

LIQUIDATED DAMAGES FORMULA

$$LD = \frac{0.15C}{T}$$

where: LD = liquidated damages per working day
(rounded to the nearest dollar)
C = original Contract amount
T = original time for Physical Completion

When the Contract Work has progressed to the extent that the Contracting Agency has full use and benefit of the facilities, both from the operational and safety standpoint, all the initial plantings are completed and only minor incidental Work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains to physically complete the total Contract, the Engineer may determine the Contract Work is substantially complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

Liquidated damages will not be assessed for any days for which an extension of time is granted. No deduction or payment of liquidated damages will, in any degree, release the Contractor from further obligations and liabilities to complete the entire Contract.

1-08.10 Termination of Contract

1-08.10(1) Termination for Default

The Contracting Agency may terminate the Contract upon the occurrence of any one or more of the following events:

1. If the Contractor fails to supply sufficient skilled workers or suitable materials or equipment;

2. If the Contractor refuses or fails to prosecute the Work with such diligence as will ensure its Physical Completion within the original Physical Completion time and any extensions of time which may have been granted to the Contractor by change order or otherwise;
3. If the Contractor is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Contractor or a third party files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws concerning the Contractor, or if a trustee or receiver is appointed for the Contractor or for any of the Contractor's property on account of the Contractor's insolvency, and the Contractor or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract within 15-calendar days of receipt of a request for assurance from the Contracting Agency;
4. If the Contractor disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;
5. If the Contractor disregards the authority of the Contracting Agency;
6. If the Contractor performs Work which deviates from the Contract, and neglects or refuses to correct rejected Work; or
7. If the Contractor otherwise violates in any material way any provisions or requirements of the Contract.

Once the Contracting Agency determines that sufficient cause exists to terminate the Contract, written notice shall be given to the Contractor and its Surety indicating that the Contractor is in breach of the Contract and that the Contractor is to remedy the breach within 15-calendar days after the notice is sent. In case of an emergency such as potential damage to life or property, the response time to remedy the breach after the notice may be shortened. If the remedy does not take place to the satisfaction of the Contracting Agency, the Engineer may, by serving written notice to the Contractor and Surety either:

1. Transfer the performance of the Work from the Contractor to the Surety; or
2. Terminate the Contract and at the Contracting Agency's option prosecute it to completion by contract or otherwise. Any extra costs or damages to the Contracting Agency shall be deducted from any money due or coming due to the Contractor under the Contract.

If the Engineer elects to pursue one remedy, it will not bar the Engineer from pursuing other remedies on the same or subsequent breaches.

Upon receipt of a notice that the Work is being transferred to the Surety, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons satisfactory to the Engineer to finish the Work and provide the materials without termination of the Contract. Such employment shall not relieve the Surety of its obligations under the Contract and the bond. If there is a transfer to the Surety, payments on estimates covering Work subsequent to the transfer shall be made to the extent permitted under law to the Surety or its agent without any right of the Contractor to make any claim.

If the Engineer terminates the Contract or provides such sufficiency of labor or materials as required to complete the Work, the Contractor shall not be entitled to receive any further payments on the Contract until all the Work contemplated by the Contract has been fully performed. The Contractor shall bear any extra expenses incurred by the Contracting Agency in completing the Work, including all increased costs for completing the Work, and all damages sustained, or which may be sustained, by the Contracting

Agency by reason of such refusal, neglect, failure, or discontinuance of Work by the Contractor. If liquidated damages are provided in the Contract, the Contractor shall be liable for such liquidated damages until such reasonable time as may be required for Physical Completion of the Work. After all the Work contemplated by the Contract has been completed, the Engineer will calculate the total expenses and damages for the completed Work. If the total expenses and damages are less than any unpaid balance due the Contractor, the excess will be paid by the Contracting Agency to the Contractor. If the total expenses and damages exceed the unpaid balance, the Contractor and the Surety shall be jointly and severally liable to the Contracting Agency and shall pay the difference to the State of Washington, Department of Transportation on demand.

In exercising the Contracting Agency's right to prosecute the Physical Completion of the Work, the Contracting Agency shall have the right to exercise its sole discretion as to the manner, method, and reasonableness of the costs of completing the Work. In the event that the Contracting Agency takes Bids for remedial Work or Physical Completion of the project, the Contractor shall not be eligible for the Award of such Contracts.

In the event the Contract is terminated, the termination shall not affect any rights of the Contracting Agency against the Contractor. The rights and remedies of the Contracting Agency under the Termination Clause are in addition to any other rights and remedies provided by law or under this Contract. Any retention or payment of monies to the Contractor by the Contracting Agency will not release the Contractor from liability.

If a notice of termination for default has been issued and it is later determined for any reason that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Termination for Public Convenience in Section 1-08.10(2). This shall include termination for default because of failure to prosecute the Work, and the delay was found to be excusable under the provisions of Section 1-08.8.

1-08.10(2) Termination for Public Convenience

The Engineer may terminate the Contract in whole, or from time to time in part, whenever:

1. The Contractor is prevented from proceeding with the Work as a direct result of an Executive Order of the President with respect to the prosecution of war or in the interest of national defense; or an Executive Order of the President or Governor of the State with respect to the preservation of energy resources;
2. The Contractor is prevented from proceeding with the Work by reason of a preliminary, special, or permanent restraining order of a court of competent jurisdiction where the issuance of such restraining order is primarily caused by acts or omissions of persons or agencies other than the Contractor; or
3. The Engineer determines that such termination is in the best interests of the Contracting Agency.

1-08.10(3) Termination for Public Convenience Payment Request

After receipt of Termination for Public Convenience as provided in Section 1-08.10(2), the Contractor shall submit to the Contracting Agency a request for costs associated with the termination. The request shall be prepared in accordance with the claim procedures outlined in Sections 1-09.11 and 1-09.12. The request shall be submitted promptly but in no event later than 90-calendar days from the effective date of termination.

The Contractor agrees to make all records available to the extent deemed necessary by the Engineer to verify the costs in the Contractor's payment request.

1-08.10(4) Payment for Termination for Public Convenience

Whenever the Contract is terminated in accordance with Section 1-08.10(2), payment will be made in accordance with Section 1-09.5 for the actual Work performed.

If the Contracting Agency and the Contractor cannot agree as to the proper amount of payment, then the matter will be resolved as outlined in Section 1-09.13 except that, if the termination occurs because of the issuance of a restraining order as provided in Section 1-08.10(2), the matter will be resolved through mandatory and binding arbitration as described in Sections 1-09.13(3)A and B, regardless of the amount of the claim.

1-08.10(5) Responsibility of the Contractor and Surety

Termination of a Contract shall not relieve the Contractor of any responsibilities under the Contract for Work performed. Nor shall termination of the Contract relieve the Surety or Sureties of obligations under the Contract Bond or retainage bond for Work performed.

1-09 MEASUREMENT AND PAYMENT**1-09.1 Measurement of Quantities**

In measuring all acceptably completed Bid items of Work, the Engineer will:

1. Use United States standard measure,
2. Make all measurements as described in this section, unless individual Specifications require otherwise,
3. Follow methods generally recognized as conforming to good engineering practice,
4. Conform to the usual practice of the Contracting Agency by carrying measurements and computations to the proper significant figure or fraction of units for each item, and
5. Measure horizontally or vertically (unless otherwise specified).

The terms listed below shall be defined as follows in all measurements under this section:

“Lump Sum” (when used as an item of payment): complete payment for the Work described for that item in the Contract.

“Gage” (in measurement of plates): the U.S. Standard Gage.

“Gage” (in measurement of galvanized sheets used to manufacture corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing): that specified in AASHTO M 36, M 167, M 196, M 197, or M 219.

“Gage” (in measurement of wire): that specified in AASHTO M 32.

“Ton”: 2,000-pounds of avoirdupois weight.

For each basis of measurement listed below, the Engineer will use the method of measurement described. For Bid items or materials measured on the basis of:

Hour - measured for each hour that Work is actually performed. Portions of an hour will be rounded up to a half hour.

Square Yard or Square Foot — the measurement shall be a calculation from the neat dimensions shown in the Plans or as altered by the Engineer. If there is an exception within the measured area where the item of Work is not performed (such as a drainage vault within a measured sidewalk) and if the exception area is greater than 9-square feet, then the area of the exception will be subtracted from the payment area calculated from the neat dimensions.

Linear Foot (pipe culverts, guard rail, underdrains, etc.) — measured parallel to the Structure’s base or foundation, unless the Plans require otherwise.

Weight — weighed as required in Section 1-09.2.

Volume (of excavation and embankment) — measured by the average-end-area method or by the finite element analysis method utilizing digital terrain modeling techniques. All or some computations may be based on ground elevations and other data derived photogrammetrically. The Engineer may correct for curvature.

Volume (in the hauling vehicle) — measured at the point of delivery. Hauling vehicles may be of any size or type the Engineer approves provided that the body is of such shape that the actual contents may be readily and accurately determined. If the Engineer requires, the Contractor shall level loads at the delivery point to facilitate measurement.

For each item listed below, the Engineer will use the method of measurement described.

Structures — measured on the neat lines shown in the Plans or as altered by the Engineer. When a complete Structure or structural unit is specified as the unit of measurement, the unit shall include all fittings and accessories.

Timber — measured by the thousand board feet (MBM) actually used in the Structure. Measurements will be based on nominal widths and thicknesses and the extreme length of each piece.

Standard Manufactured Items (fence, wire, plates, rolled shapes, pipe conduit, etc., when specified) — measured by the manufacturer's identification of gage, unit weight, section dimension, etc. The Engineer will accept manufacturing tolerances set by each industry unless cited Specifications require more stringent tolerances.

Cement — measured by the pound, ton, or sack. A sack shall be 94-pounds.

Asphalt — measured by the gallon or ton. If measured by gallon, measurement will be made at 60 F (or will be corrected to the volume at 60 F in keeping with ASTM D 1250). If shipped by rail, truck, or transport, measurement will be by net certified scale masses or certified volumes (corrected for material lost en route or not actually incorporated into the Work).

No measurement will be made for:

1. Work performed or materials placed outside lines shown in the Plans or set by the Engineer;
2. Materials wasted, used, or disposed of in a manner contrary to the Contract;
3. Rejected materials (including those rejected after placement if the rejection resulted from the Contractor's failure to comply with the Contract);
4. Hauling and disposing of rejected materials;
5. Material remaining on hand after the Work is completed, except as provided in Sections 1-09.5 and 1-09.10; or
6. Any other Work or material contrary to any Contract Provision.

1-09.2 Weighing Equipment

1-09.2(1) General Requirements for Weighing Equipment

Any Highway or bridge construction materials to be proportioned or measured and paid for by weight shall be weighed on a scale. These materials include natural, manufactured or processed materials obtained from natural deposits, stockpiles, or bunkers.

Scales

Scales shall:

1. Be accurate to within 0.5-percent of the correct weight throughout the range of use;
2. Not include spring balances;
3. Include beams, dials, or other reliable readout equipment;
4. Be arranged so that operators and Inspectors can safely and easily see the dials, beams, rods, and operating scale mechanisms;
5. Be built to prevent scale parts from binding, vibrating, or being displaced and to protect all working parts from falling material, wind, and weather; and
6. Be carefully maintained, with bunkers and platforms kept clear of accumulated materials that could cause errors and with knife edges given extra care and protection.

Weighers

The Contractor shall provide, set up, and maintain the scales necessary to perform this Work. “Contractor provided scale operations” are defined as operations where a scale is set up specifically for the project and most, if not all, material weighed on the scale is utilized for Contract Work. In this situation, the Contracting Agency will provide a person to operate the scale, write tickets, perform scale checks and prepare reports.

The Contractor may also utilize permanently installed, certified, commercial scales. “Commercial scale operations” include the use of established scales used to sell materials to the public on a regular basis. In addition, for the purposes of this Specification, all batch, hopper, and belt scales are considered to be commercial scales. Commercial scales shall meet the same requirements as Contractor-provided scales. When a commercial scale is used, the Contractor may utilize a commercial scale operator provided it is at no additional cost to the Contracting Agency. In addition, the Contractor shall ensure that:

1. the Engineer is allowed to observe the weighing operation and check the daily scale weight record;
2. scale verification checks are performed at the direction of the Contracting Agency (see “1-09.2(5) Measurement”);
3. several times each day, the commercial scale operator records and makes certain the platform scale balances and returns to zero when the load is removed; and
4. test results and scale weight records for each day’s hauling operations are provided to the Engineer daily. Unless otherwise approved, reporting shall utilize form 422-027, Scaleman’s Daily Report.

Trucks and Tickets

Each truck to be weighed shall bear a unique identification number. This number shall be legible and in plain view of the scale operator. Each vehicle operator shall obtain a weigh or load ticket from the scale operator. The Contractor shall provide tickets for self-printing scales. All tickets shall, at a minimum, contain the following information:

1. Date of haul;
2. Contract number;
3. Contract unit Bid item;
4. Unit of measure;
5. Identification of hauling vehicle; and
6. Weight delivered
 - a. Net weight in the case of batch and hopper scales
 - b. Gross weight, tare and net weight in the case of platform scales (tare may be omitted if a tare beam is used)
 - c. Approximate load out weight in the case of belt conveyor scales

The vehicle operator shall deliver the ticket in legible condition to the material receiver at the material delivery point. The material delivery point is defined as the location where the material is incorporated into the permanent Work.

1-09.2(2) Specific Requirements for Batching Scales

Each batching scale shall be designed to support a weighing container. The arrangement shall make it convenient for the operator to remove material from the weighing container while watching readout devices. Any weighing container mounted on a platform scale shall have its center of gravity directly over the platform centerline. Batching scales used for Portland or asphalt cement shall not be used for batching other materials.

Readout devices used for batching or hopper scales shall be marked at intervals evenly spaced throughout and shall be based on the scale's nominal rated capacity. These intervals shall not exceed one-tenth of 1-percent of the nominal rated capacity. Before use at a new site and then at 6-month intervals, all batching and hopper scales shall be: approved under rules of the Weights and Measures Section of the Washington State Department of Agriculture, or serviced and tested with at least 10,000-pounds by an agent of its manufacturer. In either case, the Contractor shall provide the Engineer with a copy of the final test results.

1-09.2(3) Specific Requirements for Platform Scales

Each platform scale shall be able to weigh the entire hauling vehicle or combination of connected vehicles at one time. No part of the vehicle or vehicle combination will be permitted off the platform as it is weighed. A tare weight shall be taken of each hauling vehicle at least twice daily.

Any platform scale shall be installed and maintained with the platform level and with rigid bulkheads at either end to prevent binding or shifting. The readout device shall be marked at intervals of no more than 40-pounds. Test records shall show results to the nearest 20-pounds. During weighing operations, weights shall be read and recorded to the nearest 100-pounds. Before use at a new site and then at 6-month intervals, any platform scale shall be: approved under rules of the Washington State Department of Agriculture's Weights and Measures Section, or serviced and tested with at least 10,000-pounds by an agent of its manufacturer. In either case, the Contractor shall provide the Engineer with a copy of the final test results.

Any Contractor-supplied scale shall include a scale house with a floor space of at least 6 by 10-feet. The scale house shall be wind and weather tight, shall have windows for light and ventilation, shall include a door, and shall be lockable. It shall include a table, a chair, electrical power, and a space heater. The Contractor shall provide a rest room near the scale house.

1-09.2(4) Specific Requirements for Belt Conveyor Scales

The Engineer may approve conveyor-belt weighing of untreated materials if the method and device meet all general requirements for weighing equipment. The recording tape, odometer, totalizer, calibration adjustment, and clock-time imprinter shall be kept locked and the Engineer shall retain all keys. All belt-conveyor scales shall comply with the requirements for Belt-Conveyor Scales in the National Institute of Standards and Technology (NIST) Handbook No. 44, except where these Specifications modify those requirements.

A static load test shall be made: each day after the belt-conveyor has run continuously for about 30-minutes, and again, immediately after the air temperature changes significantly. If the static load test reveals a need for adjustment, the Contractor shall perform a chain test. The Contractor shall make the computation of the test chain calibration, the calibration procedures and results, and related records available for the Engineer's review. The test chain shall be clearly marked with its calibration, carried in a suitable container, and kept immediately available for testing.

1-09.2(5) Measurement

Scale Verification Checks

Regardless of the type of scale used, a scale verification test shall be performed daily. The Contractor shall designate a separate, certified, platform scale or a separate commercial platform scale, independent of the scale used for weighing construction materials, to be used for scale verification checks. Each batch, hopper or platform scale will be tested by routing a loaded truck onto a separate certified platform scale or a separate commercial platform scale and comparing the weights. If such a separate scale

is not reasonably available, the Engineer may approve a Contractor request to use an alternate method of scale verification checks as described on Form 422-027, "Scaleman's Daily Report" and as appropriate for the type of scale.

To test the accuracy of a belt-conveyor scale, the Contractor shall weigh five or more payloads from sequential hauling units and compare these weights with weights of the same payloads taken on a separate certified platform scale. If the test results fluctuate, the Engineer may require more than five check loads. Conveyor weights will be based on tonnage values taken from the sealed odometer at the beginning and end of each check period.

If scale verification checks shows the scale has been under weighing, it shall be adjusted immediately. The Contractor shall not be compensated for any loss from under weighing.

If scale verification checks show the scale has been overweighing, its operation will cease immediately until adjusted. The Contracting Agency will calculate the combined weight of all materials weighed after the last verification check showing accurate results. This combined weight will then be reduced for payment by the percentage of scale error that exceeds 0.5-percent.

Minor Construction Items

If the Specifications and Plans require weight measurement for minor construction items, the Contractor may request permission to convert volume to weight. If the Engineer approves, an agreed factor may be used to make this conversion and volume may be used to calculate the corresponding weight for payment.

1-09.2(6) Payment

The Contracting Agency will pay for no materials received by weight unless they have been weighed as required in this section or as required by another method the Engineer has approved in writing.

Unit Contract prices for the various pay items of the project cover all costs related to weighing and proportioning materials for payment. These costs include but are not limited to:

1. Furnishing, installing, certifying, and maintaining scales;
2. Furnishing a scale house;
3. Providing a weigher with a commercial scale, if necessary;
4. Providing self-printing tickets, if necessary;
5. Rerouting a truck for verification weighing;
6. Assisting the Engineer with scale verification checks; and
7. Any other related costs associated with meeting the requirements of this section.

1-09.3 Scope of Payment

The payment provided for in the Contract shall be full payment to the Contractor for:

1. Furnishing all materials and performing all Work under the Contract (including changes in the Work, materials, or Plans) in a complete and acceptable manner;
2. All risk, loss, damage, or expense of whatever character arising out of the nature or prosecution of the Work; and
3. All expense incurred resulting from a suspension or discontinuance of the Work as specified under the Contract.

The payment of any estimate or retained percentage shall not relieve the Contractor of the obligation to make good any defective Work or materials.

Unless the Plans and Special Provisions provide otherwise, the unit Contract prices for the various Bids items shall be full payment for all labor, materials, supplies, equipment, tools, and all other things required to completely incorporate the item into the Work as though the item were to read "In Place."

If the "Payment" clause in the Specifications, for an item included in the Proposal, covers and considers all Work and material essential to that item, then the Work or materials will not be measured or paid for under any other item that may appear elsewhere in the Proposal or Specifications.

Certain payment items appearing in these Specifications may be modified in the Plans and Proposal to include:

1. The words "For Structure," "For Concrete Barrier," "For Bridge," etc. with the intent of clarifying specific use of the item; or
2. The words "Site (Site Designation)," with the intent of clarifying where a specific item of Work is to be performed.

Modification of payment items in this manner shall in no way change the intent of the Specifications relating to these items.

1-09.4 Equitable Adjustment

The equitable adjustment provided for elsewhere in the Contract shall be determined in one or more of the following ways:

1. If the parties are able to agree, the price will be determined by using:
 - a. Unit prices, or
 - b. Other agreed upon prices;
2. If the parties cannot agree, the price will be determined by the Engineer using:
 - a. Unit prices, or
 - b. Other means to establish costs.

The following limitations shall apply in determining the amount of the equitable adjustment:

1. The equipment rates shall be actual cost but shall not exceed the rates set forth in the AGC/WSDOT Equipment Rental Agreement in effect at the time the Work is performed as referred to in Section 1-09.6, and
2. To the extent any delay or failure of performance was concurrently caused by the Contracting Agency and the Contractor, the Contractor shall be entitled to a time extension for the portion of the delay or failure of performance concurrently caused, provided it make such a request pursuant to Section 1-08.8; however, the Contractor shall not be entitled to any adjustment in Contract price.
3. No claim for anticipated profits on deleted, terminated, or uncompleted Work will be allowed.
4. No claim for consequential damages of any kind will be allowed.

1-09.5 Deleted or Terminated Work

The Engineer may delete Work by change order as provided in Section 1-04.4 or may terminate the Contract in whole or part as provided in Section 1-08.10(2). When the Contract is terminated in part, the partial termination shall be treated as a deletion change order for payment purposes under this section.

Payment for completed items will be at unit Contract prices.

When any item is deleted in whole or in part by change order or when the Contract is terminated in whole or in part, payment for deleted or terminated Work will be made as follows:

1. Payment will be made for the actual number of units of Work completed at the unit Contract prices unless the Engineer determines the unit prices are inappropriate for the Work actually performed. When that determination is made by the Engineer, payment for Work performed will be as mutually agreed. If the parties cannot agree the Engineer will determine the amount of the equitable adjustment in accordance with Section 1-09.4;
2. Payment for partially completed lump sum items will be as mutually agreed. If the parties cannot agree, the Engineer will determine the amount of the equitable adjustment in accordance with Section 1-09.4;
3. To the extent not paid for by the Contract prices for the completed units of Work, the Contracting Agency will pay as part of the equitable adjustment those direct costs necessarily and actually incurred by the Contractor in anticipation of performing the Work that has been deleted or terminated;
4. The total payment for any one item in the case of a deletion or partial termination shall not exceed the Bid price as modified by approved change orders less the estimated cost (including overhead and profit) to complete the Work and less any amount paid to the Contractor for the item;
5. The total payment where the Contract is terminated in its entirety shall not exceed the total Contract price as modified by approved change orders less those amounts paid to the Contractor before the effective date of the termination; and
6. No claim for damages of any kind or for loss of anticipated profits on deleted or terminated Work will be allowed because of the termination or change order.

Contract time shall be adjusted as the parties agree. If the parties cannot agree, the Engineer will determine the equitable adjustment for Contract time.

Acceptable materials ordered by the Contractor prior to the date the Work was terminated as provided in Section 1-08.10(2) or deleted as provided in Section 1-04.4 by the Engineer, will either be purchased from the Contractor by the Contracting Agency at the actual cost and shall become the property of the Contracting Agency, or the Contracting Agency will reimburse the Contractor for the actual costs connected with returning these materials to the suppliers.

1-09.6 Force Account

The terms of the Contract or of a change order may call for Work or material to be paid for by force account. If so, then the objective of this Specification is to reimburse the Contractor for all costs associated with the Work, including costs of labor, small tools, supplies, equipment, specialized services, materials, applicable taxes and overhead and to include a profit commensurate with those costs. The amount to be paid shall be determined as described in this section.

1. **For Labor:** Labor reimbursement calculations shall be based on a "Project Labor List" (List,) prepared and submitted by the Contractor and by any Subcontractor before that firm commences force account Work. Once a List is approved by the Engineer, it shall be used to calculate force account labor payment until a new List is submitted and approved. The Engineer may compare the List to payrolls and other documents and may, at any time, require the Contractor to submit a new List. The Contractor may submit a new List at any time without such a requirement. Prior payment calculations shall not be adjusted as a result of a new List.

To be approved, the List must be accurate and meet the requirements of this section. It shall include regular time and overtime rates for all employees (or work classifications) expected to participate in force account Work. The rates

shall include the basic wage and fringe benefits, the current rates for Federal Insurance Compensation Act (FICA), Federal Unemployment Tax Act (FUTA) and State Unemployment Tax Act (SUTA), the company's present rates for Medical Aid and Industrial Insurance premiums and the planned payments for travel and per diem compensation.

In the event that an acceptable initial List or requested revised List is not received by the time that force account calculations are begun, the Engineer will develop a List unilaterally, utilizing the best data available, that will be used until a Contractor's List is received and approved. Again, prior calculations, prepared using the Engineer's List, will not be revised as a result of differences with the Contractor's List.

In addition to compensation for direct labor costs defined above, the Contracting Agency will pay Contractor 29-percent of the sum of the costs calculated for labor reimbursement to cover project overhead, general company overhead, profit, bonding, insurance required by Section 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred. This amount will include any costs of safety training and health tests, but will not include such costs for unique force account Work that is different from typical Work and which could not have been anticipated at time of Bid.

2. **For Materials:** The Contracting Agency will reimburse invoice cost for Contractor-supplied materials. For the purpose of this provision, "Materials" shall include those items incorporated into the Work, supplies used during the Work and items consumed. This cost shall include freight and handling charges and applicable taxes. Before Work is started, the Engineer may require the Contractor to obtain multiple quotations for the materials to be utilized and select the vendor with prices and terms most advantageous to the Contracting Agency.

The Contracting Agency will provide a list of the types and quantities of Contractor-supplied materials witnessed by the Contracting Agency as being utilized in force account Work. The list will be furnished promptly after the material is incorporated, on a daily basis unless agreed otherwise. The Contractor may propose corrections to the list and will supply prices for the materials and other costs and return the list to the Contracting Agency. To support the prices, the Contractor shall attach valid copies of vendor invoices. If invoices are not available for materials from the Contractor's stocks, the Contractor shall certify actual costs (at a reasonable level) by affidavit. The Engineer will review the prices and any Contractor-proposed corrections and, if reasonable, approve the completed list. Once approved, the prices will be utilized in the calculation of force account reimbursement for materials.

If, in the case of non-invoiced materials supported by Contractor affidavit, the price appears to be unreasonable, the Engineer will determine the cost for all or part of those materials, utilizing the best data available.

The Contracting Agency reserves the right to provide materials. In this case, the Contractor will receive no payment for any costs, overhead, or profit arising from the value of the materials themselves. Additional costs to handle and place the Agency-furnished material shall be compensated as described in this Specification.

In addition to compensation for direct materials cost, the Contracting Agency will pay the Contractor 21-percent of the sum of the costs calculated for materials reimbursement to cover project overhead, general company overhead, profit, bonding, insurance, required by Section 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred.

3. **For Equipment:** The Contracting Agency will reimburse the Contractor for the cost of equipment utilized in the Work. The equipment provided by the Contractor shall be of modern design and in good working condition. For the purpose of this provision, “provided” shall mean that the equipment is owned (either through outright ownership or through a long-term lease) and operated by the Contractor or Subcontractor or that the equipment is rented and operated by the Contractor or Subcontractor. Equipment that is rented with operator shall not be included here, but shall be considered a service and addressed according to subsection 4 of this provision.

The amount of payment for any Contractor-owned equipment that is utilized shall be determined according to the version of the AGC/WSDOT Equipment Rental Agreement which is in effect at the time the force account is authorized. The rates listed in the Rental Rate Blue Book (as modified by the current AGC/WSDOT Equipment Rental Agreement) shall be full compensation for all fuel, oil, lubrication, ordinary repairs, maintenance, and all other costs incidental to furnishing and operating the equipment except labor for operation.

Payment for rented equipment will be made on the basis of a valid invoice, covering the time period of the Work. Before Work is started, the Engineer may require the Contractor to obtain multiple quotations for the rental of equipment to be utilized and select the vendor with prices and terms most advantageous to the Contracting Agency. In the event that prior quotations are not obtained and the vendor is not a firm independent from the Contractor or Subcontractor, then after-the-fact quotations may be obtained by the Engineer from the open market in the vicinity and the lowest such quotation may be used in place of submitted invoice.

In addition to the payments for Contractor-owned and rented equipment, one or more lump-sum payments may be made for small tools. The amount to be paid shall be determined as outlined in the AGC/WSDOT Equipment Rental Agreement.

The Contracting Agency will add 21-percent to equipment costs to cover project overhead, general company overhead, profit, bonding, insurance, required by Section 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred. This markup will be over and above those equipment costs and will not be adjusted for any equipment overhead amounts included in the Blue Book rates.

Copies of the AGC/WSDOT Equipment Rental Agreement will be maintained on the Contracting Agency’s web site at www.wsdot.wa.gov.

4. **For Services:** Compensation under force account for specialized services shall be made on the basis of an invoice from the providing entity. A “specialized service” shall be one that is typically billed through invoice in standard industry practice. Before Work is started, the Engineer may require the Contractor to obtain multiple quotations for the service to be utilized and select the provider with prices and terms most advantageous to the Contracting Agency. In the event that prior quotations are not obtained and the service invoice is submitted by a Subcontractor, then after-the-fact quotations may be obtained by the Engineer from the open market in the vicinity and the lowest such quotation may be used in place of the submitted invoice.

Except as noted below, the Contracting Agency will pay the Contractor an additional 21-percent of the sum of the costs included on invoices for specialized services to cover project overhead, general company overhead, profit, bonding, insurance, required by Section 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred.

When a supplier of services is compensated through invoice, but acts in the manner of a Subcontractor, as described in subsection 6 of this provision, then markup for that invoice shall be according to subsection 6, "Contractor Markup on Subcontractors' Work".

5. **For Mobilization:** Force account mobilization is defined as the preparatory Work performed by the Contractor including procurement, loading and transportation of tools and equipment, and personal travel time (when such travel time is a contractual obligation of the Contractor or a customary payment for the Contractor to all employees). Mobilization also includes the costs incurred during demobilization. Pro-rata adjustments may be made when the mobilization applies to both force account and other Contract Work. The Contracting Agency will pay for mobilization for off-site preparatory Work for force account items provided that notice has been provided sufficiently in advance to allow the Engineer to witness the activity, if desired.

Any costs experienced during mobilization activities for labor, equipment, materials or services shall be listed in those sections of the force account summary and paid accordingly.

6. **For Contractor Markup on Subcontractor's Work:** When Work is performed on a force account basis by one or more approved Subcontractors, by lower-tier subcontractors or suppliers, or through invoice by firm(s) acting in the manner of a Subcontractor, the Contractor will be allowed an additional markup, from the table below, applied to the costs computed for Work done by each Subcontractor through subsections 1, 2, 3, and 4, to compensate for all administrative costs, including project overhead, general company overhead, profit, bonding, insurance required by Section 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred.

A firm may be considered to be acting as a Subcontractor when the Engineer observes one or more of the following characteristics:

- a. The person in charge of the firm's activities takes an active role in managing the overall project, including extensive coordination, interpretation of Plans, interaction with the Contracting Agency or management of a complex and interrelated operation.
- b. Rented equipment is provided fueled, operated and maintained by the firm. Operators of rented equipment are supervised directly by the firm's representative. There is little interaction between the Contractor and the employees of the firm.
- c. The firm appears to be holding the risk of performance and quality of the Work.
- d. The firm appears to be responsible for liability arising from the Work.

Markups on Work Performed by Subcontractor(s):

- (1) On amounts paid for Work performed by each Subcontractor on each force account and calculated through subsections 1-4, up to \$25,000 12 percent
- (2) On amounts greater than \$25,000 up to \$100,000 10 percent
- (3) On amounts greater than \$100,000 7 percent

The amounts and markup rates shall be calculated separately for each Subcontractor on each force account item established.

The payments provided above shall be full payment for all Work done on a force account basis. The calculated payment shall cover all expenses of every nature, kind, and description, including those listed above and any others incurred on the Work being paid through force account. Nothing in this provision shall preclude the Contractor from seeking an extension of time or time-related damages to unchanged Work arising as a result of the force account Work. The amount and costs of any Work to be paid by force account shall be computed by the Engineer, and the result shall be final as provided in Section 1-05.1.

An item that has been Bid at a unit price or lump sum in the Proposal will not be paid as force account unless a change as defined in Section 1-04.4 has occurred and the provisions require a payment adjustment. Items which are included in the Proposal as Force Account or which are added by change order as Force Account may, by agreement of the parties at any time, be converted to agreed unit prices or lump sums applicable to the remaining Work.

1-09.7 Mobilization

Mobilization consists of preconstruction expenses and the costs of preparatory Work and operations performed by the Contractor which occur before 10-percent of the total original Contract amount is earned from other Contract items. Items which are not to be included in the item of Mobilization include but are not limited to:

1. Any portion of the Work covered by the specific Contract item or incidental Work which is to be included in a Contract item or items.
2. Profit, interest on borrowed money, overhead, or management costs.
3. Any costs of mobilizing equipment for force account Work.

Based on the lump sum Contract price for "Mobilization," partial payments will be made as follows:

1. When 5-percent of the total original Contract amount is earned from other Contract items, excluding amounts paid for materials on hand, 50-percent of the amount Bid for mobilization, or 5-percent of the total original Contract amount, whichever is the least, will be paid.
2. When 10-percent of the total original Contract amount is earned from other Contract items, excluding amounts paid for materials on hand, 100-percent of the amount Bid for mobilization, or 10-percent of the total original Contract amount, whichever is the least, will be paid.
3. When the Substantial Completion Date has been established for the project, payment of any amount Bid for mobilization in excess of 10-percent of the total original Contract amount will be paid.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the Contract.

1-09.8 Payment for Material on Hand

The Contracting Agency may reimburse the Contractor for materials purchased before their use in the Work if they:

1. Meet the requirements of the Plans and Specifications;
2. Are delivered to or stockpiled near the project or other Engineer-approved storage sites; and
3. Consist of: sand, gravel, surfacing materials, aggregates, reinforcing steel, bronze plates, structural steel, machinery, piling, timber and lumber (not including forms or falsework), large signs unique to the project, prestressed concrete beams or girders, or other materials the Engineer may approve.

The Contracting Agency may reimburse the Contractor for traffic signal controllers as follows:

1. Fifty percent when the traffic signal controller and all components are received and assembled into a complete unit at the State Materials Laboratory.
2. One hundred percent when the traffic signal controller is approved for shipment to the project by the State Materials Laboratory.

The Contractor shall provide sufficient written evidence of production costs to enable the Engineer to compute the cost of Contractor-produced materials (such as sand, gravel, surfacing material, or aggregates). For other materials, the Contractor shall provide invoices from material suppliers. Each invoice shall be detailed sufficiently to enable the Engineer to determine the actual costs. Payment for materials on hand shall not exceed the total Contract cost for the Contract item.

If payment is based upon an unpaid invoice, the Contractor shall provide the Engineer with a paid invoice within 60-calendar days after the Contracting Agency's initial payment for materials on hand. If the paid invoice is not furnished in this time, any payment the Contracting Agency had made will be deducted from the next progress estimate and withheld until the paid invoice is supplied.

The Contracting Agency will not pay for material on hand when the invoice cost is less than \$2,000. As materials are used in the Work, credits equaling the partial payments for them will be taken on future estimates. Partial payment for materials on hand shall not constitute acceptance. Any material will be rejected if found to be faulty even if partial payment for it has been made.

1-09.9 Payments

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment. For items Bid as lump sum, the Contractor shall submit a breakdown of their lump sum price in sufficient detail for the Project Engineer to determine the value of the Work performed on a monthly basis. Lump sum breakdowns shall be provided to the Project Engineer no later than the date of the preconstruction meeting.

Payments will be made for Work and labor performed and materials furnished under the Contract according to the price in the Proposal unless otherwise provided.

Partial payments will be made once each month, based upon partial estimates prepared by the Engineer. Unless otherwise provided in the payment clause of the applicable Specifications, partial payment for lump sum Bid items will be a percentage of the price in the Proposal based on the Project Engineer's determination of the amount of Work performed, with consideration given to but not exclusively based on the Contractor's lump sum breakdown. The determination of payments under the Contract will be final in accordance with Section 1-05.1. Unless otherwise provided, payments will be made from the Motor Vehicle Fund.

Failure to perform any of the obligations under the Contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved.

Upon completion of all Work and after final inspection (Section 1-05.11), the amount due the Contractor under the Contract will be paid based upon the final estimate made by the Engineer and presentation of a Final Contract Voucher Certification signed by the Contractor. Such voucher shall be deemed a release of all claims of the Contractor unless a claim is filed in accordance with the requirements of Section 1-09.11 and is expressly excepted from the Contractor's certification on the Final Contract Voucher Certification. The date the Secretary signs the Final Contract Voucher Certification constitutes the final acceptance date (Section 1-05.12).

If the Contractor fails, refuses, or is unable to sign and return the Final Contract Voucher Certification or any other documentation required for completion and final acceptance of the Contract, the Contracting Agency reserves the right to establish a Completion Date (for the purpose of meeting the requirements of RCW 60.28) and unilaterally accept the Contract. Unilateral final acceptance will occur only after the Contractor has been provided the opportunity, by written request from the Engineer, to voluntarily submit such documents. If voluntary compliance is not achieved, formal notification of the impending establishment of a Completion Date and unilateral final acceptance will be provided by certified letter from the Secretary to the Contractor, which will provide 30-calendar days for the Contractor to submit the necessary documents. The 30-calendar day period will begin on the date the certified letter is received by the Contractor. The date the Secretary unilaterally signs the Final Contract Voucher Certification shall constitute the Completion Date and the final acceptance date (Section 1-05.12). The reservation by the Contracting Agency to unilaterally accept the Contract will apply to Contracts that are Physically Completed in accordance with Section 1-08.5, or for Contracts that are terminated in accordance with Section 1-08.10. Unilateral final acceptance of the Contract by the Contracting Agency does not in any way relieve the Contractor of their responsibility to comply with all Federal, State, tribal, or local laws, ordinances, and regulations that affect the Work under the Contract.

Payment to the Contractor of partial estimates, final estimates, and retained percentages shall be subject to controlling laws.

1-09.9(1) Retainage

Pursuant to RCW 60.28, a sum of 5-percent of the monies earned by the Contractor will be retained from progress estimates. Such retainage shall be used as a trust fund for the protection and payment (1) to the State with respect to taxes imposed pursuant to Title 82, RCW, and (2) the claims of any person arising under the Contract.

Monies retained under the provisions of RCW 60.28 shall, at the option of the Contractor, be:

1. Retained in a fund by the Contracting Agency, or
2. Deposited by the Contracting Agency in an escrow (interest-bearing) account in a bank, mutual saving bank, or savings and loan association (interest on monies so retained shall be paid to the Contractor). Deposits are to be in the name of the Contracting Agency and are not to be allowed to be withdrawn without the Contracting Agency's written authorization. The Contracting Agency will issue a check representing the sum of the monies reserved, payable to the bank or trust company. Such check shall be converted into bonds and securities chosen by the Contractor as the interest accrues.

At the time the Contract is executed the Contractor shall designate the option desired. The Contractor in choosing option (2) agrees to assume full responsibility to pay all costs that may accrue from escrow services, brokerage charges or both, and further agrees to assume all risks in connection with the investment of the retained percentages in securities. The Contracting Agency may also, at its option, accept a bond in lieu of retainage.

Release of the retainage will be made 60-days following the Completion Date (pursuant to RCW 39.12, and RCW 60.28) provided the following conditions are met:

1. On Contracts totaling more than \$35,000, a release has been obtained from the Washington State Department of Revenue.
2. Affidavits of Wages Paid for the Contractor and all Subcontractors are on file with the Contracting Agency (RCW 39.12.040).

3. A certificate of Payment of Contributions Penalties and Interest on Public Works Contract is received from the Washington State Employment Security Department.
4. Washington State Department of Labor and Industries (per Section 1-07.10) shows the Contractor is current with payments of industrial insurance and medical aid premiums.
5. All claims, as provided by law, filed against the retainage have been resolved. In the event claims are filed and provided the conditions of 1, 2, 3 and 4 are met, the Contractor will be paid such retained percentage less an amount sufficient to pay any such claims together with a sum determined by the Contracting Agency sufficient to pay the cost of foreclosing on claims and to cover attorney's fees.

1-09.10 Payment for Surplus Processed Materials

After the Contract is completed, the Contractor will be reimbursed actual production costs for surplus processed material produced by the Contractor from Contracting Agency-provided sources if its value is \$3,000 or more (determined by actual production costs).

The quantity of surplus material eligible for reimbursement of production costs shall be the quantity produced (but an amount not greater than 110-percent of Plan quantity or as specified by the Engineer), less the actual quantity used. The Contracting Agency will determine the actual amount of surplus material for reimbursement.

The Contractor shall not dispose of any surplus material without permission of the Engineer. Surplus material shall remain the property of the Contracting Agency without reimbursement to the Contractor if it is not eligible for reimbursement.

1-09.11 Disputes and Claims

When protests occur during a Contract, the Contractor shall pursue resolution through the Project Engineer. The Contractor shall follow the procedures outlined in Section 1-04.5.

If the negotiations using the procedures outlined in Section 1-04.5 fail to provide satisfactory resolution of protests, then the Contractor shall provide the Project Engineer with written notification that the Contractor will continue to pursue the dispute in accordance with the provisions of Section 1-09.11. The written notification shall be provided within 7-calendar days after receipt of the Engineer's written determination that the Contractor's protest is invalid pursuant to Section 1-04.5. The Contractor's written notice of dispute shall indicate whether the Contractor prefers to resolve the dispute through the use of a Disputes Review Board as outlined in Section 1-09.11(1), or to submit a formal claim directly to the Contracting Agency pursuant to Section 1-09.11(2).

If a Disputes Review Board is requested by the Contractor, the Contracting Agency will notify the Contractor in writing whether the use of a Disputes Review Board is agreed upon within 7-calendar days after receiving the Contractor's written notice of dispute. If both parties to the dispute agree, then the dispute will be referred to a Disputes Review Board according to Section 1-09.11(1). If the parties do not mutually agree to establish a Disputes Review Board then none shall be used, and the Contractor shall submit a formal claim directly to the Contracting Agency as outlined in Section 1-09.11(2), Claims.

In spite of any protest or dispute, the Contractor shall proceed promptly with the Work as the Engineer orders.

1-09.11(1) Disputes Review Board

In order to assist in the resolution of disputes arising out of the Work of this project, the Contract provides for the establishment of a Disputes Review Board, hereinafter called the "Board." The Board is created when negotiations using the procedures outlined in Section 1-04.5 fail to provide a satisfactory resolution and the Contracting Agency and Contractor mutually agree to use a Board as part of the disputes resolution process prior to the Contractor filing a formal claim pursuant to Section 1-09.11(2).

The Board will consider disputes referred to it and furnish recommendations to the Contracting Agency and Contractor to assist in the resolution of the differences between them. The purpose of the Board response to such issues is to provide nonbinding findings and recommendations designed to expose the disputing parties to an independent view of the dispute.

The Board members will be especially knowledgeable in the type of construction involved in the Project and shall discharge their responsibilities impartially and independently considering the facts and conditions related to the matters under consideration and the provisions of the Contract

1-09.11(1)A Disputes Review Board Membership

The Board shall consist of 1 member selected by the Contracting Agency and 1 member selected by the Contractor, with these 2 members to select the third member. The first 2 members shall be mutually acceptable to both the Contracting Agency and the Contractor. If 1 or both of the 2 members selected are not acceptable to the Contracting Agency or Contractor, another selection shall be made.

The Contracting Agency and Contractor shall each select their respective Board member and negotiate an agreement, separate and apart from this Contract, with their respective Board member within 14-calendar days after the parties have agreed to establish a Board, as outlined in Section 1-09.11(1).

The agreements with these 2 Board members shall contain language imposing the "Scope of Work" and "Suggested Administrative Procedures" for Disputes Review Boards available at www.wsdot.wa.gov/Consulting/. These negotiated agreements shall also include clauses that require the respective selected members to immediately pursue selection of a third member. The goal is to obtain a third Board member who will complement the first 2 by furnishing a needed expertise, which will facilitate the Board's operations.

In case a member of the Board needs to be replaced, the replacement member will be appointed in the same manner as the replaced member was appointed. The appointment of a replacement Board member will begin promptly upon determination of the need for replacement and shall be completed within 30-calendar days.

Service of a Board member may be terminated at any time with not less than 30-calendar days notice as follows:

1. The Contracting Agency may terminate service of the Contracting Agency appointed member.
2. The Contractor may terminate service of the Contractor appointed member.
3. The third member's services may be terminated by agreement of the other 2 members.
4. By resignation of the member.

Termination of a member will be followed by appointment of a substitute as specified above.

No member shall have a financial interest in the Contract, except for payments for services on the Board. The Contracting Agency-selected member and the Contractor-selected member shall not have been employed by the party who selected them within a period of 1-year; except that, service as a member of other Disputes Review Boards on other contracts will not preclude a member from serving on the Board for this Contract.

Compensation for the Board members, and the expenses of operation of the Board, shall be shared by the Contracting Agency and Contractor in accordance with the following:

1. The Contracting Agency will compensate directly the wages and travel expense for its selected member.
2. The Contractor shall compensate directly the wages and travel expense for its selected member.
3. The Contracting Agency and Contractor shall share equally in the third member's wages and travel expense, and all of the operating expenses of the Board. These equally shared expenses shall be billed to and paid by the Contracting Agency. The Contractor's share will be deducted from monies due or coming due the Contractor.
4. The Contracting Agency, through the Engineer, will provide administrative services, such as conference facilities and secretarial services, to the Board and the Contracting Agency will bear the costs for this service.

1-09.11(1)B Disputes Review Board Procedures

The Board, the Contracting Agency, and the Contractor shall develop by agreement the Board's rules of operation and procedures to be followed for the Project. In developing the Agreement, the parties shall take into consideration their respective duties and responsibilities set forth in the "Scope of Work" section of their agreements.

The parties may also consider the "Suggested Administrative Procedures" for the Board's operation included in their agreements. These Procedures express, in general terms, the policy for the creation and operation of the Board.

No dispute shall be referred to the Board unless the Contractor has complied with the requirements of Section 1-04.5 and Section 1-09.11 and the parties have mutually agreed to refer the dispute to the Board in an attempt to resolve the dispute prior to the Contractor filing a claim according to Section 1-09.11(2). If the dispute is referred to the Board, then the Board will consider the matter in dispute and provide recommendations concerning:

1. The interpretation of the Contract
2. Entitlement to additional compensation or time for performance
3. The amount of additional compensation or time for performance following a recommendation of entitlement by the Board provided that; (1) the parties were not able to reach a resolution as to the amount of the equitable adjustment or time; (2) the Engineer has made a unilateral determination of the amount of compensation for time; and (3) the Contractor has protested the Engineer's unilateral determination.
4. Other subjects mutually agreed by the Contracting Agency and Contractor to be a Board issue.

Once the Board is established, the dispute resolution process shall be as follows:

1. Board hearing dates will be scheduled by agreement of the parties.
2. The Contractor and the Contracting Agency shall each be afforded an opportunity to be heard by the Board and to offer evidence. Either party furnishing any written evidence or documentation to the Board must furnish

copies of such information to the other party a minimum of 15-calendar days prior to the date the Board sets to convene the hearing for the dispute. Either party shall produce such additional evidence as the Board may deem necessary to an understanding and determination of the dispute and furnish copies to the other party.

3. After the hearing is concluded, the Board shall meet in private and reach a conclusion supported by 2 or more members. Its findings and recommendations, together with its reasons shall then be submitted as a written report to both parties. The recommendations shall be based on the pertinent Contract Provisions and facts and circumstances involved in the dispute. The Contract shall be interpreted and construed in accordance with the laws of the State of Washington. The Board shall make every effort to reach a unanimous decision. If this proves impossible, the dissenting member may prepare a minority report.
4. Within 30-calendar days of receiving the Board recommendations, both the Contracting Agency and the Contractor shall respond to the other in writing signifying that the dispute is either resolved or remains unresolved. Although both parties should place weight upon the Board recommendations, the recommendations are not binding.

In the event the Board's recommendations do not lead to resolution of the dispute, all Board records and written recommendations, including any minority reports, will be admissible as evidence in any subsequent litigation.

If the Board's assistance does not resolve the dispute, the Contractor must file a claim according to Section 1-09.11(2) before seeking any form of judicial relief.

1-09.11(2) Claims

If the Contractor claims that additional payment is due and the Contractor has pursued and exhausted all the means provided in Sections 1-04.5 and Section 1-09.11(1) to resolve a dispute, including the use of a Disputes Review Board if one was established, the Contractor may file a claim as provided in this section. The Contractor agrees to waive any claim for additional payment if the written notifications provided in Section 1-04.5 are not given, or if the Engineer is not afforded reasonable access by the Contractor to complete records of actual cost and additional time incurred as required by Section 1-04.5, or if a claim is not filed as provided in this section. The fact that the Contractor has provided a proper notification, provided a properly filed claim, or provided the Engineer access to records of actual cost, shall not in any way be construed as proving or substantiating the validity of the claim. If the claim, after consideration by the Engineer, is found to have merit, the Engineer will make an equitable adjustment either in the amount of costs to be paid or in the time required for the Work, or both. If the Engineer finds the claim to be without merit, no adjustment will be made.

All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Engineer to ascertain the basis and amount of the claim. All claims shall be submitted to the Project Engineer as provided in Section 1-05.15. As a minimum, the following information must accompany each claim submitted:

1. A detailed factual statement of the claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the claim.
2. The date on which facts arose which gave rise to the claim.
3. The name of each Contracting Agency individual, official, or employee involved in or knowledgeable about the claim.
4. The specific provisions of the Contract which support the claim and a statement of the reasons why such provisions support the claim.

5. If the claim relates to a decision of the Engineer which the Contract leaves to the Engineer's discretion or as to which the Contract provides that the Engineer's decision is final, the Contractor shall set out in detail all facts supporting its position relating to the decision of the Engineer.
6. The identification of any documents and the substance of any oral communications that support the claim.
7. Copies of any identified documents, other than Contracting Agency documents and documents previously furnished to the Contracting Agency by the Contractor, that support the claim (manuals which are standard to the industry, used by the Contractor, may be included by reference).
8. If an extension of time is sought:
 - a. The specific days and dates for which it is sought,
 - b. The specific reasons the Contractor believes a time extension should be granted,
 - c. The specific provisions of Section 1-08.8 under which it is sought, and
 - d. The Contractor's analysis of its progress schedule to demonstrate the reason for a time extension.
9. If additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
 - a. Labor;
 - b. Materials;
 - c. Direct equipment. The actual cost for each piece of equipment for which a claim is made or in the absence of actual cost, the rates established by the AGC/WSDOT Equipment Rental Agreement which was in effect when the Work was performed. In no case shall the amounts claimed for each piece of equipment exceed the rates established by that Equipment Rental Agreement even if the actual cost for such equipment is higher. The Contracting Agency may audit the Contractor's cost records as provided in Section 1-09.12 to determine actual equipment cost. The following information shall be provided for each piece of equipment:
 - (1) Detailed description (e.g., Motor Grader Diesel Powered Caterpillar 12 "G," Tractor Crawler ROPS & Dozer Included Diesel, etc.);
 - (2) The hours of use or standby; and
 - (3) The specific day and dates of use or standby;
 - d. Job overhead;
 - e. Overhead (general and administrative);
 - f. Subcontractor's claims (in the same level of detail as specified herein is required for any Subcontractor's claims); and
 - g. Other categories as specified by the Contractor or the Contracting Agency.
10. A notarized statement shall be submitted to the Project Engineer containing the following language:

Under the penalty of law for perjury or falsification, the undersigned,

_____,
(name) (title)

of _____
(company)

hereby certifies that the claim for extra compensation and time, if any, made herein for Work on this Contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the Contract between the parties.

Dated _____ /s/ _____

Subscribed and sworn before me this _____ day of _____

Notary Public

My Commission Expires: _____

It will be the responsibility of the Contractor to keep full and complete records of the costs and additional time incurred for any alleged claim. The Contractor shall permit the Engineer to have access to those records and any other records as may be required by the Engineer to determine the facts or contentions involved in the claim. The Contractor shall retain those records for a period of not less than three years after final acceptance.

The Contractor shall pursue administrative resolution of any claim with the Engineer or the designee of the Engineer.

Failure to submit with the Final Contract Voucher Certification such information and details as described in this section for any claim shall operate as a waiver of the claims by the Contractor as provided in Section 1-09.9.

Provided that the Contractor is in full compliance with all the provisions of this section and after the formal claim document has been submitted, the Contracting Agency will respond, in writing, to the Contractor as follows:

1. Within 45-calendar days from the date the claim is received by the Contracting Agency if the claim amount is less than \$100,000;
2. Within 90-calendar days from the date the claim is received by the Contracting Agency if the claim amount is equal to or greater than \$100,000; or
3. If the above restraints are unreasonable due to the complexity of the claim under consideration, the Contractor will be notified within 15-calendar days from the date the claim is received by the Contracting Agency as to the amount of time which will be necessary for the Contracting Agency to prepare its response.

Full compliance by the Contractor with the provisions of this section is a contractual condition precedent to the Contractor's right to seek judicial relief.

1-09.11(3) Time Limitation and Jurisdiction

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the State of Washington arising from the Contract shall be brought within 180-calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the State of Washington; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of Thurston County. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the State of Washington arising from the Contract are filed with the State or initiated in court, the Contractor shall permit the State to have timely access to any records deemed necessary by the State to assist in evaluating the claims or action.

1-09.12 Audits**1-09.12(1) General**

The Contractor's wage, payroll, and cost records on this Contract shall be open to inspection or audit by representatives of the Contracting Agency during the life of the Contract and for a period of not less than 3-years after the date of final acceptance of the Contract. The Contractor shall retain these records for that period. The Contractor shall also guarantee that the wage, payroll, and cost records of all Subcontractors and all lower tier Subcontractors shall be retained and open to similar inspection or audit for the same period of time. The audit may be performed by employees of the Contracting Agency or by an auditor under contract with the Contracting Agency. The Contractor, Subcontractors, or lower tier subcontractors shall provide adequate facilities, acceptable to the Engineer, for the audit during normal business hours. The Contractor, Subcontractors, or lower tier subcontractors shall make a good faith effort to cooperate with the auditors. If an audit is to be commenced more than 60-calendar days after the final acceptance date of the Contract, the Contractor will be given 20-calendar days notice of the time when the audit is to begin. If any litigation, claim, or audit arising out of, in connection with, or related to this Contract is initiated, the wage, payroll, and cost records shall be retained until such litigation, claim, or audit involving the records is completed.

1-09.12(2) Claims

All claims filed against the Contracting Agency shall be subject to audit at any time following the filing of the claim. Failure of the Contractor, Subcontractors, or lower tier subcontractors to maintain and retain sufficient records to allow the auditors to verify all or a portion of the claim or to permit the auditor access to the books and records of the Contractor, Subcontractors, or lower tier subcontractors shall constitute a waiver of a claim and shall bar any recovery thereunder.

1-09.12(3) Required Documents for Audits

As a minimum, the auditors shall have available to them the following documents:

1. Daily time sheets and supervisor's daily reports.
2. Collective Bargaining Agreements.
3. Insurance, welfare, and benefits records.
4. Payroll registers.
5. Earnings records.
6. Payroll tax forms.
7. Material invoices and requisitions.
8. Material cost distribution worksheet.
9. Equipment records (list of company equipment, rates, etc.).
10. Vendors', rental agencies', Subcontractors', and lower tier subcontractors' invoices.
11. Contracts between the Contractor and each of its Subcontractors, and all lower-tier subcontractor contracts and supplier contracts.
12. Subcontractors' and lower tier subcontractors' payment certificates.
13. Canceled checks (payroll and vendors).
14. Job cost reports, including monthly totals.
15. Job payroll ledger.
16. General ledger.
17. Cash disbursements journal.

18. Financial statements for all years reflecting the operations on this Contract. In addition, the Contracting Agency may require, if it deems appropriate, additional financial statements for 3-years preceding execution of the Contract and 3-years following final acceptance of the Contract.
19. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others.
20. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
21. All documents which relate to each and every claim together with all documents which support the amount of damages as to each claim.
22. Worksheets or software used to prepare the claim establishing the cost components for items of the claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals.
23. Worksheets, software, and all other documents used by the Contractor to prepare its Bid.

An audit may be performed by employees of the Contracting Agency or a representative of the Contracting Agency. The Contractor and its Subcontractors shall provide adequate facilities acceptable to the Contracting Agency for the audit during normal business hours. The Contractor and all Subcontractors shall cooperate with the Contracting Agency's auditors.

1-09.13 Claims Resolution

1-09.13(1) General

Prior to seeking claim resolution through nonbinding alternative dispute resolution processes, binding arbitration, or litigation, the Contractor shall proceed under the administrative procedures in Sections 1-04.5, 1-09.11 and any Special Provision provided in the Contract for resolution of disputes. The provisions of these sections must be complied with in full, as a condition precedent to the Contractor's right to seek claim resolution through any nonbinding alternative dispute resolution process, binding arbitration or litigation.

1-09.13(2) Nonbinding Alternative Disputes Resolution (ADR)

Nonbinding ADR processes are encouraged and available upon mutual agreement of the Contractor and the Contracting Agency for all claims submitted in accordance with Section 1-09.11, provided that:

1. All the administrative remedies provided for in the Contract have been exhausted;
2. The Contracting Agency has been given the time and opportunity to respond to the Contractor as provided in Section 1-09.11(2); and
3. The Contracting Agency has determined that it has sufficient information concerning the Contractor's claims to participate in a nonbinding ADR process.

The Contracting Agency and the Contractor mutually agree that the cost of the nonbinding ADR process shall be shared equally by both parties with each party bearing its own preparation costs.

The type of nonbinding ADR process shall be agreed upon by the parties and shall be conducted within the State of Washington at a location mutually acceptable to the parties.

The Contractor agrees that the participation in a nonbinding ADR process does not in any way waive the requirement that binding arbitration or litigation proceedings must commence within 180-calendar days of final acceptance of the Contract, the same as any other claim or causes of action as provided in Section 1-09.11(3).

1-09.13(3) Claims \$250,000 or Less

The Contractor and the Contracting Agency mutually agree that those claims which total \$250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through mandatory and binding arbitration as described herein.

1-09.13(3)A Administration of Arbitration

Arbitration shall be as agreed by the parties or, if the parties cannot agree, arbitration shall be administered through the American Arbitration Association (AAA) using the following arbitration methods:

1. The current version of the Northwest Region Expedited Commercial Arbitration Rules shall be used for claims with an amount less than \$25,000.
2. The current version of the Expedited Procedures of the Construction Industry Arbitration Rules shall be used for claims with an amount equal to or greater than \$25,000 and less than \$50,000.
3. The current version of the standard procedures of the Construction Industry Arbitration Rules shall be used for claims with an amount equal to or greater than \$50,000 and not greater than \$250,000.

The Contracting Agency and the Contractor mutually agree the venue of any arbitration hearing shall be within the State of Washington and any such hearing shall be conducted within the State of Washington.

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of Thurston County. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-09.13(3)B Procedures to Pursue Arbitration

If the dispute cannot be resolved through administrative procedures provided in Sections 1-04.5, 1-09.11, and any Special Provision provided in the Contract for resolution of disputes or through a mutually agreed upon nonbinding ADR process, the Contractor shall advise the Engineer, in writing, that mandatory and binding arbitration is desired. The parties may agree on an arbitration process, or, if the parties cannot agree a demand for arbitration shall be filed by the Contractor, in accordance with the AAA rules, with the Contracting Agency, and with the AAA. Selection of the arbitrator and the administration of the arbitration shall proceed in accordance with AAA rules using arbitrators from the list developed by the AAA, except that: for claims under \$25,000 using the Northwest Region Expedited Commercial Arbitration Rules, arbitration selection shall proceed pursuant to Section 55 of the Expedited Procedure of the Construction Industry Arbitration Rules. Arbitration shall proceed utilizing the appropriate rule of the AAA as determined by the dollar amount of the claim as provided in Section 1-09.13(3)A.

Unresolved disputes which do not involve delays or impacts to unchanged Work may be brought to binding arbitration prior to Physical Completion of the project, provided that:

1. All the administrative remedies provided for in the Contract have been exhausted;
2. The dispute has been pursued to the claim status as provided in Section 1-09.11(2); and
3. The Contractor certifies in writing that claims for delays or impacts to the Work will not result from the dispute.

Unless the Contracting Agency and the Contractor agree otherwise, all other unresolved claims (disputes which have been pursued to the claim status) which arise from a Contract must be brought in a single arbitration hearing and only after Physical Completion of the Contract. The total of those unresolved claims cannot be greater than \$250,000 to be eligible for arbitration.

In addition, the Contractor agrees arbitration proceedings must commence, by filing of the aforementioned demand for arbitration, within 180 calendar days of final acceptance of the contract, the same as any other claim or causes of action as provided in Section 1-09.11(3).

The scope and extent of discovery shall be determined by the arbitrator in accordance with AAA rules. In addition, each party for claims greater than \$25,000 shall serve upon the other party a "statement of proof." The statement of proof shall be served, with a copy to the AAA, no less than 20-calendar days prior to the arbitration hearing and shall include:

1. The identity, current business address, and residential address of each witness who will testify at the hearing,
2. The identity of a witness as an expert if an expert witness is to be called, a statement as to the subject matter and the substance of the facts and opinions on which the expert is expected to testify, a summary of the grounds for each opinion, and a resume of the expert's qualifications, and
3. A list of each document that the party intends to offer in evidence at the arbitration hearing. Either party may request from the other party a copy of any document listed. If such a request is made, a copy of the document shall be provided within five calendar days from the date the request is received.

The arbitrator may permit a party to call a witness or offer a document not shown or included in the statement of proof only upon a showing of good cause.

1-09.13(4) Claims in Excess of \$250,000

The Contractor and the Contracting Agency mutually agree that those claims in excess of \$250,000, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree to resolve the claim through binding arbitration.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.1 General

The Contractor, utilizing contractor labor and contractor-provided equipment and materials (except when such labor, equipment or materials are to be provided by the Contracting Agency as specifically identified herein), shall plan, manage, supervise and perform all temporary traffic control activities needed to support the Work of the Contract.

1-10.1(1) Materials

Materials shall meet the requirements of the following sections:

Stop/Slow Paddles	9-35.1
Construction Signs	9-35.2
Wood Sign Posts	9-35.3
Sequential Arrow Signs	9-35.4
Portable Changeable Message Signs	9-35.5
Barricades	9-35.6
Traffic Safety Drums	9-35.7
Barrier Drums	9-35.8
Traffic Cones	9-35.9
Tubular Markers	9-35.10
Warning Lights and Flashers	9-35.11
Truck-Mounted Attenuator	9-35.12
Tall Channelizing Devices	9-35.13
Portable Temporary Traffic Control Signal	9-35.14

1-10.1(2) Description

The Contractor shall provide flaggers, spotters and all other personnel required for labor for traffic control activities and not otherwise specified as being furnished by the Contracting Agency.

The Contractor shall perform all procedures necessary to support the Contract Work.

Unless otherwise permitted by the Contract or approved by the Project Engineer, the Contractor shall keep all existing pedestrian routes and access points (including sidewalks, paths, and crosswalks) open and clear at all times.

The Contractor shall provide signs and other traffic control devices not otherwise specified as being furnished by the Contracting Agency. The Contractor shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public at all times from injury or damage as a result of the Contractor's operations, which may occur on or adjacent to Highways, roads, streets, sidewalks, or paths. No Work shall be done on or adjacent to any Traveled Way until all necessary signs and traffic control devices are in place.

The traffic control resources and activities described shall be used for the safety of the public, of the Contractor's employees, and of the Contracting Agency's personnel and to facilitate the movement of the traveling public. Traffic control resources and activities may be used for the separation or merging of public and construction traffic when such use is in accordance with a specific approved traffic control plan.

Upon failure of the Contractor to immediately provide flaggers; erect, maintain, and remove signs; or provide, erect, maintain, and remove other traffic control devices when ordered to do so by the Engineer, the Contracting Agency may, without further notice to the Contractor or the Surety, perform any of the above and deduct all of the costs from the Contractor's payments.

The Contractor shall be responsible for providing adequate labor, sufficient signs, and other traffic control devices, and for performing traffic control procedures needed for the protection of the Work and the public at all times regardless of whether or not the labor, devices or procedures have been ordered by the Engineer, furnished by the Contracting Agency, or paid for by the Contracting Agency.

Wherever possible when performing Contract Work, the Contractor's equipment shall follow normal and legal traffic movements. The Contractor's ingress and egress of the Work area shall be accomplished with as little disruption to traffic as possible. Traffic control devices shall be removed by picking up the devices in a reverse sequence to that used for installation. This may require moving backwards through the workzone. When located behind barrier or at other locations shown on approved traffic control plans, equipment may operate in a direction opposite to adjacent traffic.

The Contractor is advised that the Contracting Agency may have entered into operating agreements with one or more law enforcement organizations for cooperative activities. Under such agreements, at the sole discretion of the Contracting Agency, law enforcement personnel may enter the workzone for enforcement purposes and may participate in the Contractor's traffic control activities. The responsibility under the Contract for all traffic control resides with the Contractor and any such participation by law enforcement personnel in Contractor traffic control activities will be referenced in the Special Provisions or will be preceded by an agreement and, if appropriate, a cost adjustment. Nothing in this Contract is intended to create an entitlement, on the part of the Contractor, to the services or participation of the law enforcement organization.

1-10.2 Traffic Control Management

1-10.2(1) General

It is the Contractor's responsibility to plan, conduct and safely perform the Work. The Contractor shall manage temporary traffic control with his or her own staff. Traffic control management responsibilities shall be formally assigned to one or more company supervisors who are actively involved in the planning and management of field Contract activities. The Contractor shall provide the Engineer with a copy of the formal assignment. The duties of traffic control management may not be subcontracted.

The Contractor shall designate an individual or individuals to perform the duties of the primary Traffic Control Supervisor (TCS). The designation shall also identify an alternate TCS who can assume the duties of the primary TCS in the event of that person's inability to perform. The TCS shall be responsible for safe implementation of approved Traffic Control Plans provided by the Contractor.

The primary and alternate TCS shall be certified as worksite traffic control supervisors by one of the organizations listed in the Special Provisions. Possession of a current TCS card and flagging card by the primary and alternate TCS is mandatory. A traffic control management assignment and a TCS designation are required on all projects that will utilize traffic control.

The Contractor shall maintain 24-hour telephone numbers at which the Contractor's assigned traffic control management personnel and the TCS can be contacted and be available upon the Engineer's request at other than normal working hours. These persons shall have the resources, ability and authority to expeditiously correct any deficiency in the traffic control system.

1-10.2(1)A Traffic Control Management

The responsibilities of the Contractor's traffic control management personnel shall include:

1. Overseeing and approving the actions of the Traffic Control Supervisor (TCS) to ensure that proper safety and traffic control measures are implemented and consistent with the specific requirements created by the Contractor's workzones and the Contract. Some form of oversight shall be in place and effective even when the traffic control management personnel are not present at the jobsite.
2. Providing the Contractor's designated TCS with approved Traffic Control Plans (TCPs) which are compatible with the Work operations and traffic control for which they will be implemented. Having the latest adopted edition of the *Manual On Uniform Traffic Control Devices for Streets and Highways (MUTCD)*, including the *Washington State Modifications to the MUTCD* and applicable standards and Specifications available at all times on the project.
3. Discussing proposed traffic control measures and coordinating implementation of the Contractor-adopted traffic control plan(s) with the Engineer.
4. Coordinating all traffic control operations, including those of Subcontractors and suppliers, with each other and with any adjacent construction or maintenance operations.
5. Coordinating the project's activities (such as ramp closures, road closures, and lane closures) with appropriate police, fire control agencies, city or county engineering, medical emergency agencies, school districts, and transit companies.
6. Overseeing all requirements of the Contract that contribute to the convenience, safety, and orderly movement of vehicular and pedestrian traffic.
7. Reviewing the TCS's diaries daily and being aware of field traffic control operations.
8. Being present on-site a sufficient amount of time to adequately satisfy the above-listed responsibilities.

Failure to carry out any of the above-listed responsibilities shall be a failure to comply with the Contract and may result in a suspension of Work as described in Section 1-08.6.

1-10.2(1)B Traffic Control Supervisor

A Traffic Control Supervisor (TCS) shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized or less frequently, as authorized by the Engineer.

The TCS shall personally perform all the duties of the TCS. During nonwork periods, the TCS shall be available to the job site within a 45-minute time period after notification by the Engineer.

The TCS's duties shall include:

1. Having a current set of approved traffic control plans (TCPs), applicable Contract Provisions as provided by the Contractor, the latest adopted edition of the *MUTCD*, including the *Washington State Modifications to the MUTCD*, the book *Quality Guidelines for Temporary Work Zone Traffic Control Devices*, and applicable standards and Specifications.
2. Inspecting traffic control devices and nighttime lighting for proper location, installation, message, cleanliness, and effect on the traveling public. Traffic control devices shall be inspected at least once per hour during working hours except that Class A signs need to be checked once a week and nighttime lighting need to be checked only once a shift. Traffic control devices left in

place for 24-hours or more shall also be inspected once during the nonworking hours when they are initially set up (during daylight or darkness, whichever is opposite of the working hours). The TCS shall correct, or arrange to have corrected, any deficiencies noted during these inspections.

3. Preparing a daily traffic control diary on each day that traffic control is performed using DOT Forms 421-040A and 421-040B, and submitting them to the Engineer no later than the end of the next working day. The Contractor may use alternate forms if approved by the Engineer. Diary entries shall include, but not be limited to:
 - a. Time of day when signs and traffic control devices are installed and removed,
 - b. Location and condition of signs and traffic control devices,
 - c. Revisions to the traffic control plan,
 - d. Lighting utilized at night, and
 - e. Observations of traffic conditions.
4. Making minor revisions to the traffic control plan to accommodate site conditions provided that the original intent of the traffic control plan is maintained and the revision has the concurrence of both the Contractor and the Engineer.
5. Attending traffic control coordinating meetings or coordination activities as necessary for full understanding and effective performance.
6. Ensuring that all needed traffic control devices and equipment are available and in good working condition prior to the need to install or utilize them.

The TCS may perform the Work described in Section 1-10.3(1)A **Flaggers and Spotters** or in Section 1-10.3(1)B **Other Traffic Control Labor** and be compensated under those Bid items, provided that the duties of the TCS are accomplished.

1-10.2(2) Traffic Control Plans

The traffic control plan or plans appearing in the Contract documents show a method of handling vehicle, bicycle, and pedestrian traffic. All construction signs, flaggers, spotters and other traffic control devices are shown on the traffic control plan(s) except for emergency situations. Where mainline Contract traffic control plans are developed with the intent of operating without the use of flaggers or spotters, the plans shall contain a note that states, "NO FLAGGERS OR SPOTTERS". The use of flaggers or spotters to supplement these traffic control plans will not be allowed except in a case where no other means of traffic control can be used or in the event of an emergency. If the Contractor proposes the use of flaggers or spotters with one of these plans, this will constitute a modification requiring approval by the Engineer. The modified plans shall show locations for all the required advance warning signs and a safe, protected location for the flagging station. If flagging is to be performed during hours of darkness, the plan shall include appropriate illumination for the flagging station.

When the Contractor's chosen method of performing the Work in the Contract requires some form of temporary traffic control, the Contractor shall either: (1.) designate and adopt, in writing, the traffic control plan or plans from the Contract documents that support that method; or (2.) submit a Contractor's plan that modifies, supplements or replaces a plan from the Contract documents. Any Contractor-proposed modification, supplement or replacement shall show the necessary construction signs, flaggers, spotters and other traffic control devices required to support the Work. Any Contractor-proposed traffic control plan shall conform to the established standards for plan development as shown in the *MUTCD*, Part 6. The Contractor's submittal, either designating and adopting a traffic control plan from the Contract documents or proposing a Contractor-developed

plan, shall be provided to the Engineer for approval at least 10-calendar days in advance of the time the signs and other traffic control devices are scheduled to be installed and utilized. The Contractor shall be solely responsible for submitting any proposed traffic control plan or modification, obtaining the Engineer's approval and providing copies of the approved Traffic Control Plans to the Traffic Control Supervisor.

1-10.2(3) Conformance to Established Standards

Flagging, signs, and all other traffic control devices and procedures furnished or provided shall conform to the standards established in the latest WSDOT adopted edition of the *Manual On Uniform Traffic Control Devices for Streets and Highways (MUTCD)*, published by the U.S. Department of Transportation and the *Washington State Modifications to the MUTCD*. Judgment of the quality of devices furnished will be based upon *Quality Guidelines for Temporary Traffic Control Devices*, published by the American Traffic Safety Services Association. Copies of the *MUTCD* and *Quality Guidelines for Temporary Control Devices* may be purchased from the American Traffic Safety Services Association, 15 Riverside Parkway, Suite 100, Fredericksburg, Virginia 22406-1022. The *Washington State Modifications to the MUTCD* may be obtained from the Department of Transportation, Olympia, Washington 98504.

In addition to the standards of the MUTCD described above, the Contracting Agency has crashworthiness requirements for most workzone devices. The National Cooperative Highway Research Project (NCHRP) Report 350 has established requirements for crash testing. Workzone devices are divided into four categories. Each of those categories is described below:

Category 1 includes those items that are small and lightweight, channelizing, and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineator posts, and plastic drums. All Category 1 devices used on the project shall meet the requirements of NCHRP 350 as certified by the manufacturer of the device.

Category 2 includes devices that are not expected to produce significant vehicular velocity change, but may otherwise be hazardous. Examples of this class are barricades, portable sign supports and signs. All Category 2 devices shall meet the requirements of NCHRP 350. For the purpose of definition, a sign support and sign shall be considered a single unit. A new sign may be purchased for an existing sign support and the entire unit will be defined as "existing equipment."

Category 3 is for hardware expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. Barriers, fixed sign supports, crash cushions, truck mounted attenuators (TMA's) and other work zone devices not meeting the definitions of Category 1 or 2 are examples from this category. Many Category 3 devices are defined in the design of the project. Where this is the case, NCHRP 350 requirements have been incorporated into the design and the Contractor complies with the requirements by constructing devices according to the Plans and Specifications. Where the device is a product chosen by the Contractor, the device chosen must be compliant with the requirements of NCHRP 350.

Category 4 includes portable or trailer-mounted devices such as arrow displays, temporary traffic signals, area lighting supports, and portable changeable message signs. Crash testing is not required for these devices.

The condition of signs and traffic control devices shall be acceptable or marginal as defined in the book *Quality Guidelines for Temporary Traffic Control Devices*, and will be accepted based on a visual inspection by the Engineer. The Engineer's decision on the condition of a sign or traffic control device shall be final. A sign or traffic control device determined to be unacceptable shall be removed from the project and replaced within 12-hours of notification.

1-10.3 Traffic Control Labor, Procedures and Devices

1-10.3(1) Traffic Control Labor

The Contractor shall furnish all personnel for flagging, spotting, for the execution of all procedures related to temporary traffic control and for the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control traffic during construction operations.

Vests and other high-visibility apparel shall be in conformance with Section 1-07.8.

1-10.3(1)A Flaggers and Spotters

Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. The flagging card shall be immediately available and shown to the Contracting Agency upon request.

Flagging stations shall be shown on Traffic Control Plans at locations where construction operations require stopping or diverting public traffic. Flagging stations shall be staffed only when flagging is required. This staffing may be continuous or intermittent, depending on the nature of the construction activity. Whenever a flagger is not required to stop or divert traffic, the flagger shall move away from the flagging station to a safer location. During hours of darkness, flagging stations shall be illuminated in a manner that insures that flaggers can easily be seen but that does not cause glare to the traveling public.

Flagger station illumination shall meet the requirements of the MUTCD and these Specifications.

The Contractor shall provide portable lighting equipment capable of sufficiently illuminating a flagger and their station without creating glare for oncoming motorists, yet will meet the mobility requirements of the operation. The lighting stations shall be located on the same side of the roadway as the flagger and aimed either parallel or perpendicular to the traveled lanes to minimize glare. The lighting devices shall be located 5 to 10-feet from the edge of the travel lane with a mounting height of 15 to 25-feet above the ground. The flagger should be visible and discernable as a flagger from a distance of 1,000-feet.

Flaggers shall be equipped with portable two-way radios, with a range suitable for the project. The radios shall be capable of having direct contact with project management (foremen, superintendents, etc.).

The Contractor shall furnish Stop/Slow paddles conforming to the requirements of Section 9-35.1 for all flagging operations.

Spotting stations shall be shown on Traffic Control Plans at locations where a spotter can detect errant drivers or other hazards and provide an effective warning to other workers. Spotting stations will not be allowed at locations where the spotter will be in unnecessary danger. The Contractor shall furnish noise-makers or other effective warning devices for spotting operations. The duties of a spotter shall not include flagging, and the use of a flagging paddle while performing spotting duties is not allowed.

1-10.3(1)B Other Traffic Control Labor

In addition to flagging or spotting duties, the Contractor shall provide personnel for all other traffic control procedures required by the construction operations and for the labor to install, maintain and remove any traffic control devices shown on Traffic Control Plans.

1-10.3(2) Traffic Control Procedures

1-10.3(2)A One-Way Traffic Control

The project Work may require that traffic be maintained on a portion of the Roadway during the progress of the Work using one-way traffic control. If this is the case, the Contractor's operation shall be confined to one-half the Roadway, permitting traffic on the other half. If shown on an approved traffic control plan or directed by the Engineer, one-way traffic control, in accordance with the MUTCD, shall be provided and shall also conform to the following requirements:

In any one-way traffic control configuration, side roads and approaches will be closed or controlled by a flagger or by appropriate approved signing. A side road flagger will coordinate with end flaggers where there is line of sight and with the pilot car where the end flaggers cannot be seen.

Queues of vehicles will be allowed to take turns passing through the workzone in the single open lane. When one-way traffic control is in effect, Contractor vehicles shall not use the open traffic lane except while following the same rules and routes required of the public traffic.

As conditions permit, the Contractor shall, at the end of each day, leave the Work area in such condition that it can be traveled without damage to the Work, without danger to traffic, and without one-way traffic control. If, in the opinion of the Engineer, one-way traffic control cannot be dispensed with after working hours, then the operation will be continued throughout the non-working hours.

1-10.3(2)B Rolling Slowdown

Rolling slowdown traffic control operations are not to be used for routine Work that can be addressed by standard lane or shoulder closure traffic control. When a short-term roadway closure is needed for an infrequent, nonrepetitive Work operation such as a sign bridge removal or utility wire crossing, the Contractor may implement a rolling slowdown on a multilane roadway, as part of an approved traffic control plan.

The Contractor shall submit for approval a traffic control plan detailing the expected delay time, interchange ramp control, and rolling slowdown distance. A portable changeable message sign shall be placed ahead of the starting point of the traffic control to warn traffic of the slowdown. The sign shall be placed far enough ahead of the Work to avoid any expected backup of vehicles.

A rolling slowdown shall use traffic control vehicles with flashing amber lights. At least one traffic control vehicle will be used for every two lanes to be slowed, plus a control vehicle will serve as a following (chase) vehicle for traffic ahead of the blockade. The traffic control vehicles shall enter the roadway and form a moving blockade to reduce traffic speeds and create a clear area ahead of the blockade in which to accomplish the Work without a total stoppage of traffic.

The location where the traffic control vehicles shall begin the slowdown and the speed at which the moving blockade will be allowed to travel will be calculated to accommodate the estimated time needed for closure. The chase control vehicle shall follow the slowest vehicle ahead of the blockade. When the chase vehicle passes, the Contractor may begin the Work operation. In the event that the Work operation is not completed when the moving blockade reaches the site, all Work except that necessary to clear the Roadway shall cease immediately and the Roadway shall be cleared and reopened as soon as possible.

All ramps and entrances to the Roadway between the moving blockade and Work operation shall be temporarily closed using flaggers. Radio communications between the Work operation and the moving blockade shall be established and utilized to adjust the speed of the blockade to accommodate the closure time needed.

1-10.3(2)C Lane Closure Setup/Takedown

Where allowed by the Contract and where shown on approved traffic control plans or directed by the Engineer, the Contractor shall set up traffic control measures to close one or more lanes of a multi-lane facility. When this is to occur, the following sequence shall be followed:

1. A portable changeable message sign shall be established in advance of the operation, far enough back to provide warning of both the operation and any queue of traffic that has formed during the operation.
2. Advance warning signs are set up on the Shoulder of the Roadway opposite the lane to be closed,
3. Advance warning signs are set up on the same Shoulder as the lane to be closed,
4. A truck-mounted attenuator, with arrow board, is moved into place at the beginning of the closure taper,
5. Channelization devices are placed to mark the taper and the length of the closure as shown on the traffic control plan.

Once the lane is closed, the TMA/arrow board combination shall be replaced with an arrow board without attenuator.

If additional lanes are to be closed, this shall be done in sequence with previous lane closures using the same sequence of activities. A truck-mounted attenuator with arrow board is required during the process of closing each additional lane and is to be replaced with an arrow board without attenuator after the lane is closed. Each closed lane shall be marked with a separate arrow board at all times.

Traffic control for lane closures shall be removed in the reverse order of its installation.

1-10.3(2)D Mobile Operations

Where construction operations are such that movement along the length of a Roadway is continuous or near-continuous to the extent that a stationary traffic control layout will not be effective, the Contractor may implement a moving, or mobile, traffic control scheme. Such moving control shall always be conducted in the same direction as the adjacent traffic.

Where shown on an approved traffic control plan or where directed by the Engineer, mobile traffic control shall consist of portable equipment, moving with the operation. A portable changeable message sign shall be established in advance of the operation, far enough back to provide warning of both the operation and of any queue of traffic that has formed during the operation. The advance sign shall be continuously moved to stay near the back of the queue at all times. A truck-mounted attenuator, with arrow board, shall be positioned and maintained at a fixed distance upstream of the Work. A shadow vehicle, with truck-mounted attenuator shall be positioned and maintained immediately upstream of the Work.

1-10.3(2)E Patrol & Maintain Traffic Control Measures

At all times, when temporary traffic control measures are in place, the Contractor shall provide for patrolling and maintaining these measures. The Work shall consist of resetting errant devices, assuring visibility of all devices, cleaning and repairing where necessary, providing maintenance for all equipment, including replacing batteries and light bulbs as well as keeping motorized and electronic items functioning, and adjusting the location of devices to respond to actual conditions, such as queue length, unanticipated traffic conflicts and other areas where planned traffic control has proven ineffective.

This Work shall be performed by the Contractor, either by or under the direction of the Traffic Control Supervisor. Personnel, with vehicles if necessary, shall be dispatched so that all traffic control can be reviewed at least once per hour during working hours and at least once during each non-working day.

1-10.3(3) Traffic Control Devices

1-10.3(3)A Construction Signs

All construction signs required by approved traffic control plans, as well as any other appropriate signs directed by the Engineer shall be furnished by the Contractor. The Contractor shall provide the posts or supports and erect and maintain the signs in a clean, neat, and presentable condition until the need for them has ended. Post mounted signs shall be installed as shown in Standard Plans. When the need for construction signs has ended, the Contractor, upon approval of the Engineer, shall remove all signs, posts, and supports from the project and they shall remain the property of the Contractor.

No passing zones on the existing Roadway that are marked with paint striping and which striping is to be obliterated by construction operations shall be replaced by “Do Not Pass” and “Pass With Care” signs. The Contractor shall provide and install the posts and signs. The signs shall be maintained by the Contractor until they are removed or until the Contract is Physically Completed. When the project includes striping by the Contractor, the signs and posts shall be removed by the Contractor when the no passing zones are reestablished by striping. The signs and posts will become the property of the Contractor. When the Contractor is not responsible for striping and when the striping by others is not completed when the project is Physically Completed, the posts and signs shall be left in place and shall become the property of the Contracting Agency.

All existing signs, new permanent signs installed under this Contract, and construction signs installed under this Contract that are inappropriate for the traffic configuration at a given time shall be removed or completely covered in accordance with Section 8-21.3(3). Construction signs will be divided into two classes. Class A construction signs are those signs that remain in service throughout the construction or during a major phase of the Work. They are mounted on posts, existing fixed Structures, or substantial supports of a semi-permanent nature. Class A signs will be designated as such on the approved Traffic Control Plan. “Do Not Pass” and “Pass With Care” signs are classified as Class A construction signs. Sign and support installation for Class A signs shall be in accordance with the Contract Plans or the Standard Plans. Class B construction signs are those signs that are placed and removed daily, or are used for short durations which may extend for 1 to 3-days. They are mounted on portable or temporary mountings. Tripod-mounted signs in place more than 3-days in any one location, unless approved by the Project Engineer, shall be required to be post-mounted and shall be classified as Class A construction signs.

Where it is necessary to add weight to signs for stability, sand bags or other similar ballast may be used, but the height shall not be more than 4-inches above the Roadway surface, and shall not interfere with the breakaway features of the device. The Contractor shall follow the manufacturer’s recommendations for sign ballasting.

Signs, posts, or supports that are lost, stolen, damaged, destroyed, or which the Engineer deems to be unacceptable while their use is required on the project shall be replaced by the Contractor.

1-10.3(3)B Sequential Arrow Signs

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate and maintain sequential arrow signs.

1-10.3(3)C Portable Changeable Message Sign

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate and maintain portable changeable message signs.

1-10.3(3)D Barricades

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, install and maintain barricades. Barricades shall be kept in good repair and shall be removed immediately when, in the opinion of the Engineer, they are no longer functioning as designed.

Where it is necessary to add weight to barricades for stability, sand bags or other similar ballast may be used, but the height shall not be more than 4-inches above the Roadway surface and shall not interfere with the breakaway features of the device. The Contractor shall follow the manufacturer's recommendation for sign ballasting.

1-10.3(3)E Traffic Safety Drums

Where shown on an approved Traffic Control Plan, or where ordered by the Engineer, the Contractor shall provide, install and maintain traffic safety drums.

Used drums may be utilized, provided all drums used on the project are of essentially the same configuration and the devices conform to Section 1-10.2(3).

The drums shall be designed to resist overturning by means of a weighted lower unit that will separate from the drum when impacted by a vehicle.

Drums shall be regularly maintained to ensure that they are clean and that the drum and reflective material are in good condition. If the Engineer determines that a drum has been damaged beyond usefulness, or provides inadequate reflectivity, a replacement drum shall be furnished.

When the Engineer determines that the drums are no longer required, they shall be removed from the project and shall remain the property of the Contractor.

1-10.3(3)F Barrier Drums

Where shown on approved Traffic Control Plans and as ordered by the Engineer, barrier drums shall be placed on temporary concrete barrier at the following approximate spacing:

Concrete Barrier Placement	Barrier Drum Spacing in Feet
Tangents $\frac{1}{2}$ -mile or less ¹	2 times posted speed limit
Tangents greater than $\frac{1}{2}$ -mile ¹	4 times posted speed limit
Tapers and Curves ²	posted speed limit
Notes: 1 A minimum of 3 barrier drums shall be used. 2 A minimum of 5 barrier drums shall be used.	

Temporary concrete barrier reflectors may be excluded when using barrier drums.

Both legs of the barrier drums shall be completely filled with sand. The top oval should not be filled.

Used barrier drums may be used, provided all barrier drums used on the project are of essentially the same configuration.

Barrier drums shall be regularly maintained to ensure that they are clean and that the barrier drum and reflective material are in good condition. If the Engineer determines that a barrier drum has been damaged beyond usefulness, or provides inadequate reflectivity, a replacement barrier drum shall be furnished.

When the Engineer determines that the drums are no longer required, they shall be removed from the project and shall remain the property of the Contractor.

1-10.3(3)G Traffic Cones and Tall Channelizing Devices

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, install and maintain traffic cones or tall channelizing devices. Cones and tall channelizing devices shall be kept in good repair and shall be removed immediately when directed by the Engineer. Where wind or moving traffic frequently displaces cones or tall channelizing devices, an effective method of stabilizing them, such as stacking two together at each location, shall be employed, or heavier weighted bases may be necessary.

1-10.3(3)H Tubular Markers

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, install and maintain tubular markers. Tubular markers shall be kept in good repair and shall be removed immediately when directed by the Engineer. Tubular markers are secondary devices and are not to be used as substitutes for cones or other delineation devices without an approved traffic control plan.

Where the Traffic Control Plan shows pavement-mounted tubular markers, the adhesive used to fasten the base to the pavement shall be suitable for the purpose, as approved by the Engineer. During the removal of pavement-mounted tubular markers, care shall be taken to avoid damage to the existing pavement. Any such damage shall be repaired by the Contractor at no cost to the Contracting Agency.

1-10.3(3)I Warning Lights and Flashers

Where shown attached to traffic control devices on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide and maintain flashing warning lights. Lights attached to advance warning signs shall be Type B, high-intensity. Lights attached to traffic safety drums, barricades or other signs shall be Type C, steady-burning low intensity or, where attention is to be directed to a specific device, Type A, flashing low-intensity units.

1-10.3(3)J Truck-Mounted Attenuator

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate and maintain truck-mounted impact attenuators (TMA). These attenuators shall be available, on-site, for the entire duration of their projected use.

The TMA shall be positioned to separate and protect construction workzone activities from normal traffic flow.

During use, the attenuator shall be in the full down-and-locked position. For stationary operations, the truck's parking brake shall be set.

A TMA may be used in lieu of a temporary impact attenuator when approved by the Engineer as part of a stage traffic control shift to protect an object such as blunt barrier end or bridge pier column that is located within the work zone clear zone. This use of a TMA is restricted to a maximum of 3-days or approved extension by the Project Engineer.

1-10.3(3)K Portable Temporary Traffic Control Signal

Where shown on an approved traffic control plan, the Contractor shall provide, operate, maintain, and remove a portable temporary traffic control signal system to provide alternating one-lane traffic operations on a two-way facility. A portable temporary traffic control signal system shall be defined as two traffic control units that operate together. The system shall be trailer mounted, fully self-contained, and designed so that it can be easily transported and deployed at different locations.

The Contractor shall submit the manufacturer's specifications for the portable temporary traffic control signal to the Engineer for approval at the pre-construction meeting or a minimum of two weeks prior to installation, whichever occurs first.

A manufacturer's representative is required to demonstrate the capabilities of the temporary portable signal prior to approval and provide training to contractor personnel as necessary.

Remote manual control of the portable traffic control signal by the Traffic Control Supervisor (TCS) or a qualified operator may be allowed if necessitated by Work area or traffic conditions and as approved by the Engineer.

Maximum length between signal heads shall be 1500-ft unless otherwise shown on the Plans or ordered by the Project Engineer in accordance with Section 1-04.4.

The Project Engineer or designee will inspect the signal system at initial installation/operation and either provide or approve the signal timing. Final approval will be based on the results of the operational inspection.

The Traffic Control Supervisor shall monitor and ensure that the Portable Temporary Traffic Control Signal is fully operational and maintained as specified by the manufacturer. This Work may include cleaning and replacing lamps and other routine maintenance as needed.

If repairs or adjustments are required the Contractor shall respond immediately and provide flagger traffic control, if the Roadway cannot be safely reopened to two-way traffic, until such time that repairs can be made. The Contractor shall either repair the signal or replace with a backup unit within 24-hours.

The Engineer will monitor the traffic, signal operation and order adjustments as needed based on traffic conditions. Timing adjustments require the approval of the Project Engineer.

As shown on the traffic control plan, temporary stop bars and "STOP HERE ON RED Signs (R10-6) shall be provided at the location traffic is expected to stop during the red display. The stop bar locations shall be illuminated at night. The illumination shall be the responsibility of the Contractor and shall be adjusted to ensure minimal glare to motorists.

When not in operation, remove signal heads from the view of traffic or cover signal heads with bags made of non-ripping material specifically designed for covering signal heads. Do not use trash bags of any type. Remove, cover, fold, or turn all inappropriate signs so that they are not readable by oncoming traffic.

The Contractor shall provide and install all field wiring to make a complete and operational portable traffic control signal and shall maintain the system throughout the life of the Contract.

Portable temporary traffic signals shall not be installed within 300-feet of at-grade railroad crossing, or if driveways or Roadway access points are located between the portable temporary traffic control signals.

1-10.4 Measurement

1-10.4(1) Lump Sum Bid for Project (No Unit Items)

When the Bid Proposal contains the item "Project Temporary Traffic Control", there will be no measurement of unit items for Work defined by Section 1-10 except as described in Section 1-10.4(3). Also, except as described in Section 1-10.4(3), all of Sections 1-10.4(2) and 1-10.5(2) are deleted.

No specific unit of measurement will apply to the lump sum item of "Project Temporary Traffic Control."

1-10.4(2) Item Bids with Lump Sum for Incidentals

When the Bid Proposal does not contain the item "Project Temporary Traffic Control", Sections 1-10.4(1) and 1-10.5(1) are deleted and the Bid Proposal will contain some or all of the following items, measured as noted.

No specific unit of measurement will apply to the lump sum item of “Traffic Control Supervisor.”

“Flaggers and Spotters” will be measured by the hour. Hours will be measured for each flagging or spotting station, shown on an approved Traffic Control Plan, when that station is staffed in accordance with Section 1-10.3(1)A. When a flagging station is staffed on an intermittent basis, no deduction will be made in measured hours provided that the person staffing the station is in a standby mode and is not performing other duties.

“Other Traffic Control Labor” will be measured by the hour. Time spent on activities other than those described herein will not be measured under this item. The hours of one person will be measured for each patrol route that the Contractor performs the Work described under Section 1-10.3(2)E, Patrol and Maintain Traffic Control Measures, regardless of the actual number of persons per route. Hours will be measured for each person engaged in any one of the following activities:

- Operating a pilot vehicle during one-way piloted traffic control.
- Operating a traffic control vehicle or a chase vehicle during a rolling slowdown operation.
- Operating a vehicle or placing/removing traffic control devices during the setup or takedown of a lane closure. Performing preliminary Work to prepare for placing and removing these devices.
- Operating any of the moving traffic control equipment, or adjusting signing during a mobile operation as described in Section 1-10.3(2)D.
- Placing and removing Class B construction signs. Performing preliminary Work to prepare for placing and removing these signs.
- Relocation of Portable Changeable Message Signs within the project limits.
- Installing and removing Barricades, Traffic Safety Drums, Barrier Drums, Cones, Tubular Markers and Warning Lights and Flashers to carry out approved Traffic Control Plan(s). Performing preliminary Work to prepare for installing these devices.

“Construction Signs, Class A” will be measured by the square foot of panel area for each sign designated on an approved Traffic Control Plan as Class A or for each construction sign installed as ordered by the Engineer and designated as Class A at the time of the order. Class A signs may be used in more than one location and will be measured for each new installation. Class B construction signs will not be measured. Sign posts or supports will not be measured.

“Sequential Arrow Sign” will be measured by the hour for the time that each sign is operating as shown on an approved Traffic Control Plan.

“Portable Changeable Message Sign” will be measured by the hour for the time that each sign is operating as shown on an approved Traffic Control Plan.

“Truck Mounted Impact Attenuator” will be measured per each one time only for each truck with mounted impact attenuator used on the project. The final pay quantity shall be the maximum number of truck-mounted impact attenuators in place at any one time.

“Operation of Truck-Mounted Impact Attenuator” will be measured by the hour for each truck-mounted attenuator manned and operated. Manned and operated shall be when the truck-mounted impact attenuator has an operator and is required to move, in operating position, with the construction operation or when moving the TMA from one position to another on the project.

No specific unit of measurement will apply to the force account item of “Repair Truck-Mounted Impact Attenuator”.

No specific unit of measurement will apply to the lump sum item of “Other Temporary Traffic Control”.

No specific unit of measurement will apply to the lump sum item of “Portable Temporary Traffic Control Signal.”

1-10.4(3) Reinstating Unit Items with Lump Sum Traffic Control

The Contract Provisions may establish the project as lump sum, in accordance with Section 1-10.4(1) and also include one or more of the items included above in Section 1-10.4(2). When that occurs, the corresponding measurement provision in Section 1-10.4(2) is not deleted and the Work under that item will be measured as specified.

1-10.4(4) Owner-Provided Resources

The Contract Provisions may call for specific items of labor, materials or equipment, noted in Section 1-10 as the responsibility of the Contractor, to be supplied by the Contracting Agency. When this occurs, there will be no adjustment in measurement of unit quantities.

1-10.5 Payment

1-10.5(1) Lump Sum Bid for Project (No Unit Items)

“Project Temporary Traffic Control”, lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Contract Work defined in Section 1-10 except for costs compensated by Bid Proposal items inserted through Contract Provisions as described in Section 1-10.4(3).

1-10.5(2) Item Bids with Lump Sum for Incidentals

“Traffic Control Supervisor”, lump sum.

The lump sum contract payment shall be full compensation for all costs incurred by the Contractor in performing the contract work defined in Section 1-10.2(1)B.

“Flaggers and Spotters”, per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Contract Work defined in Section 1-10.3(1)A.

“Other Traffic Control Labor”, per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all labor costs incurred by the Contractor in performing the Contract Work specifically mentioned for this item in Section 1-10.4(2).

“Construction Signs Class A”, per square foot.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs of labor, materials and equipment incurred by the Contractor in performing the Contract Work described in Section 1-10.3(3)A. In the event that “Do Not Pass” and “Pass With Care” signs must be left in place, a change order, as described in Section 1-04.4, will be required. When the Bid Proposal contains the item “Sign Covering”, then covering those signs indicated in the Contract will be measured and paid according to Section 8-21.

“Sequential Arrow Sign”, per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs of labor, materials and equipment incurred by the Contractor in performing the Contract Work described in Section 1-10.3(3)B.

“Portable Changeable Message Sign”, per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs of labor, materials and equipment incurred by the Contractor in procuring all portable changeable message signs required for the project and for transporting these signs to and from the project.

“Truck-Mounted Impact Attenuator”, per each.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs of labor, materials and equipment incurred by the Contractor in performing the Contract Work described in Section 1-10.3(3)J except for costs compensated separately under the items “Operation of Truck-Mounted Impact Attenuator” and “Repair Truck-Mounted Impact Attenuator”.

“Operation of Truck-Mounted Impact Attenuator”, per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs of labor, materials and equipment incurred by the Contractor in operating truck-mounted impact attenuators on the project.

“Repair Truck-Mounted Impact Attenuator”, by force account.

All costs of repairing or replacing truck-mounted impact attenuators that are damaged by the motoring public while in use as shown on an approved Traffic Control Plan will be paid for by force account as specified in Section 1-09.6. To provide a common Proposal for all Bidders, the Contracting Agency has estimated the amount of force account for “Repair Truck-Mounted Impact Attenuator” and has entered the amount in the Proposal to become a part of the total Bid by the Contractor. Truck-mounted attenuators damaged due to the Contractor’s operation or damaged in any manner when not in use shall be repaired or replaced by the Contractor at no expense to the Contracting Agency.

“Other Temporary Traffic Control”, lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Contract Work defined in Section 1-10, and which costs are not compensated by one of the above-listed items.

“Portable Temporary Traffic Control Signal”, lump sum.

The lump sum Contract price shall be full compensation for all costs of labor, materials, and equipment incurred by the Contractor in performing the Contract Work as described in Section 1-10.3(3)K, including all costs for traffic control during manual control, adjustment, malfunction, or failure of the portable traffic control signals and during replacement of failed or malfunctioning signals.

1-10.5(3) Reinstating Unit Items with Lump Sum Traffic Control

The Contract Provisions may establish the project as lump sum, in accordance with Section 1-10.4(1) and also reinstate the measurement of one or more of the items described in Section 1-10.4(2). When that occurs, the corresponding payment provision in Section 1-10.5(2) is not deleted and the Work under that item will be paid as specified.